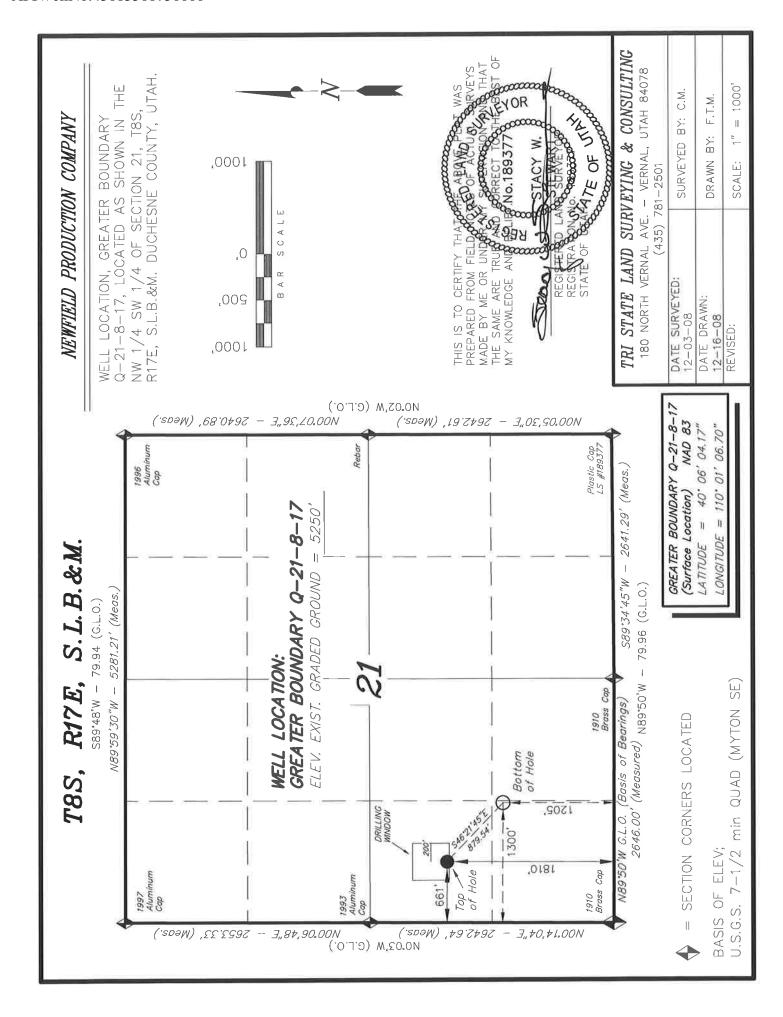
		DEPARTMENT	OF NATURAL F OIL, GAS A	RESO			FOR		
APPLI	CATION FOR P	ERMIT TO DRILL	-			1. WELL NAME a	nd NUMBER Boundary II Federal Q-	21-8-17	
2. TYPE OF WORK DRILL NEW WELL	REENTER P&A	WELL DEEPE	N WELL			3. FIELD OR WIL	DCAT MONUMENT BUTTE		
4. TYPE OF WELL Oil We	ll Coalbed	Methane Well: NO				5. UNIT or COMM	UNITIZATION AGRE GMBU (GRRV)	EMENT NAME	
6. NAME OF OPERATOR NE	WFIELD PRODUCT	ION COMPANY				7. OPERATOR PH	ONE 435 646-4825		
8. ADDRESS OF OPERATOR Rt	3 Box 3630 , Myt	on, UT, 84052				9. OPERATOR E-I	MAIL mcrozier@newfield.com	١	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		1. MINERAL OWNE	_	ATE () FEE	12. SURFACE OW	NERSHIP INDIAN (STATE	FEE (a)	
UTU-76954 13. NAME OF SURFACE OWNER (if box 12		PEDERAL (IND	TAN (41L (, ru		NER PHONE (if box :	~ ~	
15. ADDRESS OF SURFACE OWNER (if box	lohn Dyer/Boundar	ry Farms LLC				16. SURFACE OW	NER E-MAIL (if box	12 = 'fee')	
<u> </u>	475 17th Street, S	Suite 510, ,	IMINGLE PROF	DUCTIO	ON FROM	19. SLANT	`	,	
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		ULTIPLE FORMATI					DIRECTIONAL (📵 H	ORIZONTAL (
20. LOCATION OF WELL	QTR-QTR		SECTION		RANGE	MERIDIAN			
LOCATION AT SURFACE							17.0 E	S	
Top of Uppermost Producing Zone		1300 FWL	SWSW		21	8.0 S 8.0 S	17.0 E	S	
At Total Depth	1205 FSL	1300 FWL	SWSW		21	8.0 S	8.0 S 17.0 E S		
21. COUNTY DUCHESNE	2	22. DISTANCE TO N	EAREST LEASE 1205	ELINE	(Feet)	23. NUMBER OF	ACRES IN DRILLING	UNIT	
233.125.12		25. DISTANCE TO NI Applied For Drilling	EAREST WELL		ME POOL	26. PROPOSED D		5	
27. ELEVATION - GROUND LEVEL 5250	2	8. BOND NUMBER	WYB000493				RILLING WATER / APPROVAL NUMBER : 43-7478	IF APPLICABLE	
	'	Αī	TTACHMENT	s		-1			
VERIFY THE FOLLOWING	ARE ATTACHE	D IN ACCORDAN	CE WITH TH	IE UTA	AH OIL AN	ID GAS CONSERVA	ΓΙΟΝ GENERAL RI	JLES	
WELL PLAT OR MAP PREPARED BY	LICENSED SURV	EYOR OR ENGINEER	R	СОМРІ	LETE DRILL	ING PLAN			
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGREE	MENT (IF FEE SURF	ACE) I	FORM !	5. IF OPER	ATOR IS OTHER THAN	THE LEASE OWNER		
✓ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL MAP									
NAME Mandie Crozier		TITLE Regulatory 1	Tech		Р	PHONE 435 646-4825			
SIGNATURE		DATE 10/27/2009			E	MAIL mcrozier@newfie	ld.com		
API NUMBER ASSIGNED 43013501750000		APPROVAL			\	Permit Manager			

API Well No: 43013501750000 Received: 10/27/2009

	Proposed Hole, Casing, and Cement										
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)							
Prod	7.875	5.5	0	6676							
Pipe	Grade	Length	Weight								
	Grade J-55 LT&C	6676	15.5			Г					

API Well No: 43013501750000 Received: 10/27/2009

	Prop	osed Hole, Casing, a	nd Cement			
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	8.625	0	300		
Pipe	Grade	Length	Weight			
	Grade K-55 ST&C	300	24.0			Γ
					Τ	Г



Surface Use Agreement

This Agreement is made and entered into effective the 1st day of June, 2000, by and between Boundary Farms LLC, located at 475 17th Street, Suite 510, Denver, CO 80202 hereinafter referred to as "Owner" and Inland Production Company, located at 410 17th Street, Suite 700, Denver, CO 80202, or its successor, hereinafter referred to as "Operator";

WITNESSETH:

WHEREAS, Owner is the owner in fee of all or a portion of the surface to the following described lands situated in Duchesne County, Utah, to-wit:

Township 8 South, Range 17 East, S.L.M.

Section 20: NE/4SE/4 Section 21: SW/4 Section 28: N/2NW

WHEREAS, the parties desire to settle their dispute on all claims for use of the surface and damage to crops arising from the drilling, completion and production activities and operations, and agree as to the measure of settlement for operations conducted by Operator on surface owned or controlled by Owner, above described, subject to the terms of this Agreement.

NOW, THEREFORE, in consideration of the covenants and agreements herein contained, and other good and valuable consideration acknowledged and received, the parties hereto agree:

- 1. Owner hereby gives, grants and conveys unto Operator, its agents, employees and assigns, a right to enter upon and use the above-described property of Owner for the purpose of erecting, and maintaining wellsite locations together with the right-of-way and easement to maintain the wellsites and any other such related facilities being necessary for the Operator's complete enjoyment and rights. Owner shall be compensated annually the sum of FIVE HUNDRED AND NO\100 DOLLARS (\$500.00) for each wellsite located on the subject property, such payments shall be made on an annual basis within thirty (30) business days of the effective date of this Agreement. Provided however, such payments shall be waived by Owner so long as Inland Production Company or its first immediate third-party non-affiliated successor, is the designated operator of the above-described property.
- 2. Operator shall notify Owner thirty (30) days in advance of its intent to construct wellsite locations on the above-described property. Owner and Operator will work under best efforts to mutually locate wellsite locations and other such related facilities including well access roads and pipelines for the purpose of minimizing the damage to agricultural fields.
- 3. Following the completion of any well or pipeline construction, Operator agrees to promptly clean up and maintain all areas of land continuing to be utilized in connection with oil and gas operations and to pay the cost of reclaiming and reseeding upon cessation of use.

- For pipeline right-of-way construction in which a pipeline is laid through the subject property, Operator will make all possible efforts for construction operation to take place after fall harvest and prior to spring planting.
- 5. When requested, Operator agrees to bury all pipelines to a depth that is sufficient to avoid interference with operations of the Owner. Surface areas impacted by the construction shall be rehabilitated, including the reseeding of cropland at Operator expense.
- 6. The Operator shall have the right of ingress and egress to and from the premises for any and all purposes necessary or convenient to the exercise by Operator of the rights granted herein.
- 7. Operator agrees to compensate Owner for extraordinary loss or damages caused by Operator, its agents or employees to Owner's property or livestock, and that of its surface lessee, if any. Payments herein provided are acknowledged by Owner sufficient and in full for damages caused or created by reason of the reasonable and customary entry, and subsequent operation of said wellsite.
- 8. Operator will conduct its operations in a reasonable, prudent and safe manner consistent with custom industry practices used in the area. Operator agrees to minimize as much as possible the disruption of the Owner's right to use its land for agricultural purposes.

This Agreement shall be binding upon and shall be for the benefit of the successors and assigns of both the Owner and Operator whether assigned, devised, bequeathed or otherwise transferred in whole or part by the Owner or Operator, as the case may be. The conditions herein contained shall be covenants running with the land.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 11th day of August, 2000.

SURFACE OWNERS

John E. Dyer

Manager

OPERATOR:

INLAND PRODUCTION COMPANY

By: Bin I. Parning for
Title: CEO / CFO

NEWFIELD

ROCKY MOUNTAINS

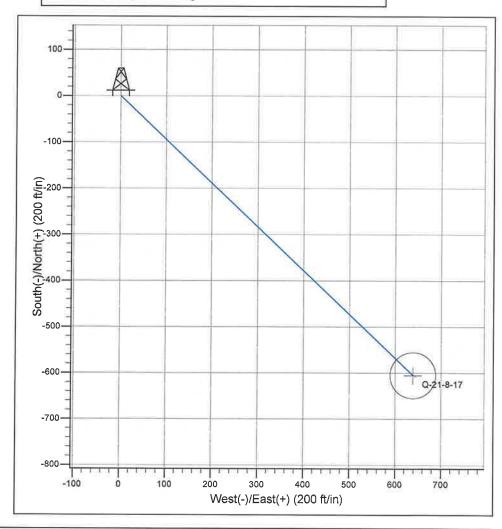
500 1000-1000 1500 2000 2000 2500-True Vertical Depth 3000 4000 4000 4500 5000 5000 5500 6000 6000 6500-6676 Vertical Section at 133.46°

Newfield Production Company

Project: Monument Butte

Site: Greater Boundary Q-21-8-17 Well: Greater Boundary Q-21-8-17

Wellbore: Wellbore #1
Design: Design #1



	SECTION DETAILS									
Sec 1	MD 0.0	Inc 0.00	Azi 0.00	TVD 0.0	+N/-S 0.0	+E/-W 0.0	DLeg 0.00	TFace 0.00	VSec 0.0	Target
2	600.0 1183.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
	6676.1	8.74 8.74	133.46 133.46	1180.7 6610.0	-30.5 -605.0	32.2 638.4	1.50 0.00	133.46 0.00	44.4 879.5	Q-21-8-17

PROJECT DETAILS: Monument Butte

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980

Zone: Utah Central Zone System Datum: Mean Sea Level



Azimuths to True North Magnetic North: 11.59°

Magnetic Field Strength: 52572.3snT Dip Angle: 65.92° Date: 1/27/2009 Model: IGRF200510

Created by: Hans Wychgram

Date: 01-27-2009



Newfield Production Company

Planning Report

Database: Company:

Project:

EDM 2003.21 Single User Db Newfield Production Company

Monument Butte

Site: Greater Boundary Q-21-8-17 Well: Greater Boundary Q-21-8-17

Wellbore #1 Wellbore: Design #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Greater Boundary Q-21-8-17

RKB @ 5262,0ft (NDSI #2) RKB @ 5262,0ft (NDSI #2)

True

Minimum Curvature

Project Monument Butte

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983

Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site Greater Boundary Q-21-8-17

Site Position: From:

Position Uncertainty:

Lat/Long 0.0 ft Northing: Easting: Slot Radius: 2,197,308.49_m 626,304.55 m

Latitude: Longitude:

40° 6' 4.170 N 110° 1' 6.700 W

Grid Convergence:

0.95 °

Well Greater Boundary Q-21-8-17 +N/-S

+E/-W

Well Position

0.0 ft 0.0 ft Northing: Easting:

2,197,308.49 m 626.304.55 m Latitude: Longitude:

40° 6' 4.170 N 110° 1' 6,700 W

Position Uncertainty

0.0 ft

Wellhead Elevation:

fţ

Ground Level:

5,250.0 ft

Wellbore Wellbore #1

Magnetics Model Name Declination Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF200510 1/27/2009 11.60 65.92 52,572

Design Design #1

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

Depth From (TVD) **Vertical Section:** +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.0 0.0 0.0 133.46

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,183.0	8.74	133.46	1,180.7	-30.5	32.2	1.50	1.50	0.00	133.46	
6,676.1	8.74	133.46	6,610.0	-605.0	638.4	0.00	0.00	0.00	0.00 Q	-21-8-17



Newfield Production Company

Planning Report

Database: EDM 2003.21 Single User Db Newfield Production Company

Project: Monument Butte

Site: Greater Boundary Q-21-8-17
Well: Greater Boundary Q-21-8-17

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Greater Boundary Q-21-8-17

RKB @ 5262.0ft (NDSI #2) RKB @ 5262.0ft (NDSI #2)

True

Minimum Curvature

sign:	Design #1								
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0,0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	133.46	700.0	-0.9	1.0	1.3	1.50	1.50	0.00
800.0	3.00	133.46	799.9	-3.6	3.8	5.2	1.50	1.50	0.00
900.0	4.50	133.46	899.7	-8.1	8.5	11.8	1.50	1.50	0.00
1,000.0	6.00	133.46	999.3	-14.4	15.2	20.9	1.50	1.50	0.00
1,100.0	7.50	133.46	1,098.6	-22.5	23.7	32.7	1.50	1.50	0.00
1,183.0	8.74	133.46	1,180.7	-30.5	32.2	44.4	1.50	1.50	0.00
1,200.0	8.74	133.46	1,197.5	-32.3	34.1	47.0	0.00	0.00	0.00
1,300.0	8.74	133.46	1,296.4	-42.8	45.1	62.2	0.00	0.00	0.00
1,400.0	8.74	133.46	1,395.2	-53.2	56.2	77.4	0.00	0.00	0.00
1,500.0	8.74	133.46	1,494.1	-63.7	67.2	92.6	0.00	0.00	0.00
1,600.0	8.74	133.46	1,592.9	-74.2	78.2	107.8	0.00	0.00	0.00
1,700.0	8.74	133.46	1,691.7	-84,6	89.3	123.0	0.00	0.00	0.00
1,800.0	8.74	133.46	1,790.6	-95.1	100.3	138.2	0.00	0.00	0.00
1,900.0	8.74	133.46	1,889.4	-105.5	111.4	153.4	0.00	0.00	0.00
2,000.0	8.74	133.46	1,988.2	-116.0	122.4	168.6	0.00	0.00	0.00
2,100.0	8.74	133.46	2,087.1	-126.4	133.4	183.8	0.00	0.00	0.00
2,200.0	8.74	133.46	2,185.9	-136.9	144.5	199.0	0.00	0.00	0.00
2,300.0	8.74	133.46	2,284.8	-147.4	155.5	214.2	0.00	0.00	0.00
2,400.0	8.74	133.46	2,383.6	-157.8	166.5	229.4	0.00	0.00	0.00
2,500.0	8.74	133.46	2,482.4	-168.3	177.6	244.6	0.00	0.00	0.00
2,600.0	8.74	133.46	2,581.3	-178.7	188.6	259.8	0.00	0.00	0.00
2,700.0	8.74	133.46	2,680.1	-189.2	199.6	275.0	0.00	0.00	0.00
2,800.0	8.74	133.46	2,778.9	-199.6	210.7	290.2	0.00	0.00	0.00
2,900.0	8.74	133.46	2,877.8	-210.1	221.7	305.4	0.00	0.00	0.00
3,000.0	8.74	133.46	2,976.6	-220.6	232.7	320.6	0.00	0.00	0.00
3,100.0	8.74	133.46	3,075.5	-231.0	243.8	335.9	0.00	0.00	0.00
3,200.0	8.74	133.46	3,174.3	-241.5	254.8	351.1	0.00	0.00	0.00
3,300.0	8.74	133.46	3,273.1	-251.9	265.8	366.3	0.00	0.00	0.00
3,400.0	8.74	133.46	3,372.0	-262.4	276.9	381.5	0.00	0.00	0.00
3,500.0	8.74	133.46	3,470.8	-272.9	287.9	396.7	0.00	0.00	0.00
3,600.0	8.74	133.46	3,569.6	-283.3	299.0	411.9	0.00	0.00	0.00
3,700.0	8.74	133.46	3,668.5	-293.8	310.0	427.1	0.00	0.00	0.00
3,800.0	8.74	133.46	3,767.3	-304.2	321.0	442.3	0.00	0.00	0.00
3,900.0	8.74	133.46	3,866.2	-314.7	332.1	457.5	0.00	0.00	0.00
4,000.0	8.74	133.46	3,965.0	-325.1	343.1	472.7	0.00	0.00	0.00
4,100.0	8.74	133.46	4,063.8	-335.6	354.1	487.9	0.00	0.00	0.00
4,200.0	8.74	133.46	4,162,7	-346.1	365.2	503.1	0.00	0.00	0.00
4,300.0	8.74	133.46	4,261.5	-356.5	376.2	518.3	0.00	0.00	0.00
4,400.0 4,500.0 4,600.0 4,700.0 4,800.0	8.74 8.74 8.74 8.74	133.46 133.46 133.46 133.46 133.46	4,360.3 4,459,2 4,558.0 4,656.9 4,755.7	-367.0 -377.4 -387.9 -398.3 -408.8	387.2 398.3 409.3 420.3 431.4	533.5 548.7 563.9 579.1 594.3	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,900.0	8.74	133.46	4,854.5	-419.3	442.4	609.5	0.00	0.00	0.00
5,000.0	8.74	133.46	4,953.4	-429.7	453.4	624.7	0.00	0.00	0.00
5,100.0	8.74	133.46	5,052.2	-440.2	464.5	639.9	0.00	0.00	0.00
5,200.0	8.74	133.46	5,151.0	-450.6	475.5	655.1	0.00	0.00	0.00

NEWFIELD ROCKY MOUNTAINS

Newfield Production Company

Planning Report

Database: Company: Project:

Site:

Well:

EDM 2003.21 Single User Db Newfield Production Company

Monument Butte

Greater Boundary Q-21-8-17 Greater Boundary Q-21-8-17

Wellbore: Wellbore #1 Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Greater Boundary Q-21-8-17

RKB @ 5262.0ft (NDSI #2) RKB @ 5262.0ft (NDSI #2)

True

Minimum Curvature

Planned Survey

.ou ourroj									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.0	8.74	133.46	5,249.9	-4 61.1	486.6	670.3	0.00	0.00	0.00
5,400.0	8.74	133.46	5,348.7	-471.5	497.6	685.5	0.00	0.00	0.00
5,500.0	8.74	133.46	5,447.6	-482.0	508.6	700.7	0.00	0.00	0.00
5,600.0	8.74	133.46	5,546.4	-492.5	519.7	715.9	0.00	0.00	0.00
5,700.0	8.74	133.46	5,645.2	-502.9	530.7	731.1	0.00	0.00	0.00
5,800.0	8.74	133.46	5,744.1	-513.4	541.7	746.3	0.00	0.00	0.00
5,900.0	8.74	133.46	5,842.9	-523.8	552.8	761.5	0.00	0.00	0.00
6,000.0	8.74	133.46	5,941.7	-534.3	563.8	776.7	0.00	0.00	0.00
6,100.0	8.74	133.46	6,040.6	-544.8	574.8	792.0	0.00	0.00	0.00
6,200.0	8.74	133.46	6,139.4	-555.2	585.9	807.2	0.00	0.00	0.00
6,300.0	8.74	133.46	6,238.3	-565.7	596.9	822.4	0.00	0.00	0.00
6,400.0	8.74	133.46	6,337.1	-576.1	607.9	837.6	0-00	0.00	0.00
6,500.0	8.74	133.46	6,435.9	-586.6	619.0	852.8	0.00	0.00	0.00
6,600.0	8.74	133.46	6,534.8	-597.0	630.0	868.0	0.00	0.00	0.00
6,676.1	8.74	133.46	6,610.0	-605.0	638.4	879.5	0.00	0.00	0.00

NEWFIELD PRODUCTION COMPANY GREATER BOUNDARY II FEDERAL 0-21-8-17 AT SURFACE: NW/SW SECTION 21, T8S, R17E DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

0 - 1830Uinta Green River 1830' Wasatch 6676'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 1830' – 6676' – Oil

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form Report of Water Encountered is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature pН

Hardness

Water Classification (State of Utah) Dissolved Calcium (Ca) (mg/l) Dissolved Iron (Fe) (ug/l) Dissolved Sodium (Na) (mg/l) Dissolved Magnesium (Mg) (mg/l) Dissolved Carbonate (CO₃) (mg/l) Dissolved Bicarbonate (NaHCO₃) (mg/l) Dissolved Chloride (Cl) (mg/l) Dissolved Sulfate (SO₄) (mg/l) Dissolved Total Solids (TDS) (mg/l) Ten Point Well Program & Thirteen Point Well Program Page 2 of 4

4. PROPOSED CASING PROGRAM

a. Casing Design: Greater Boundary II Federal Q-21-8-17

Size	Interval		Weight Gra	Grade Coupling			Design Facto	ign Factors		
Size	Тор	Bottom	vveignt	Glade	Couping	Burst	Collapse	Tension		
Surface casing	0'	2001	24.0	J-55	STC	2,950	1,370	244,000		
8-5/8"	0	300'	24.0	J-55	310	17.53	14.35	33.89		
Prod casing		0.070	45.5	1.55	1.70	4,810	4,040	217,000		
5-1/2"	0'	6,676'	15.5	J-55	LTC	2.26	1.90	2.10		

Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: Greater Boundary II Federal Q-21-8-17

Job	Fill	Description	Sacks ft ³	OH Excess*	Weight (ppg)	Yield (ft³/sk)
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
Surface casing	300	Class G W/ 270 Cacl	161	30 %	15.0	1.17
Prod casing	4,676'	Prem Lite II w/ 10% gel + 3%	323	30%	11.0	3.26
Lead	4,070	KCI	1053	3070	11.0	5.20
Prod casing	2.000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24
Tail	2,000	KCI	451	3070	17.5	1,24

^{*}Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

Ten Point Well Program & Thirteen Point Well Program Page 3 of 4

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to Exhibit C for a diagram of BOP equipment that will be used on this well.

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to ±350 feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ±350 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will visually monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. TESTING, LOGGING AND CORING PROGRAMS:

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

'APIWellNo:43013501750000'

Ten Point Well Program & Thirteen Point Well Program Page 4 of 4

bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

It is anticipated that the drilling operations will commence the first quarter of 2010, and take approximately seven (7) days from spud to rig release.

2-M SYSTEM

Blowout Prevention Equipment Systems

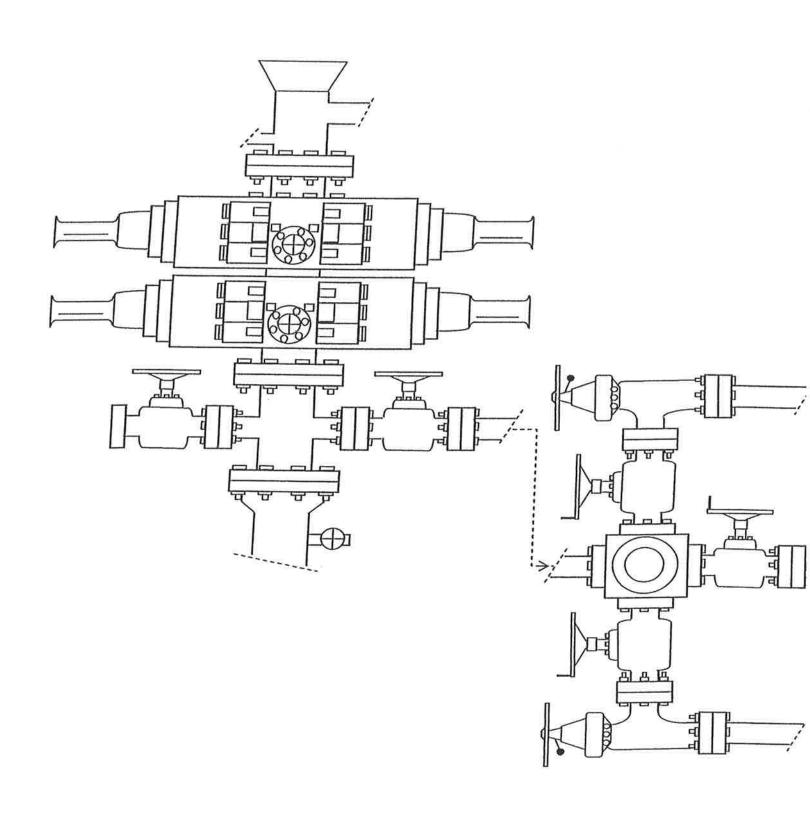
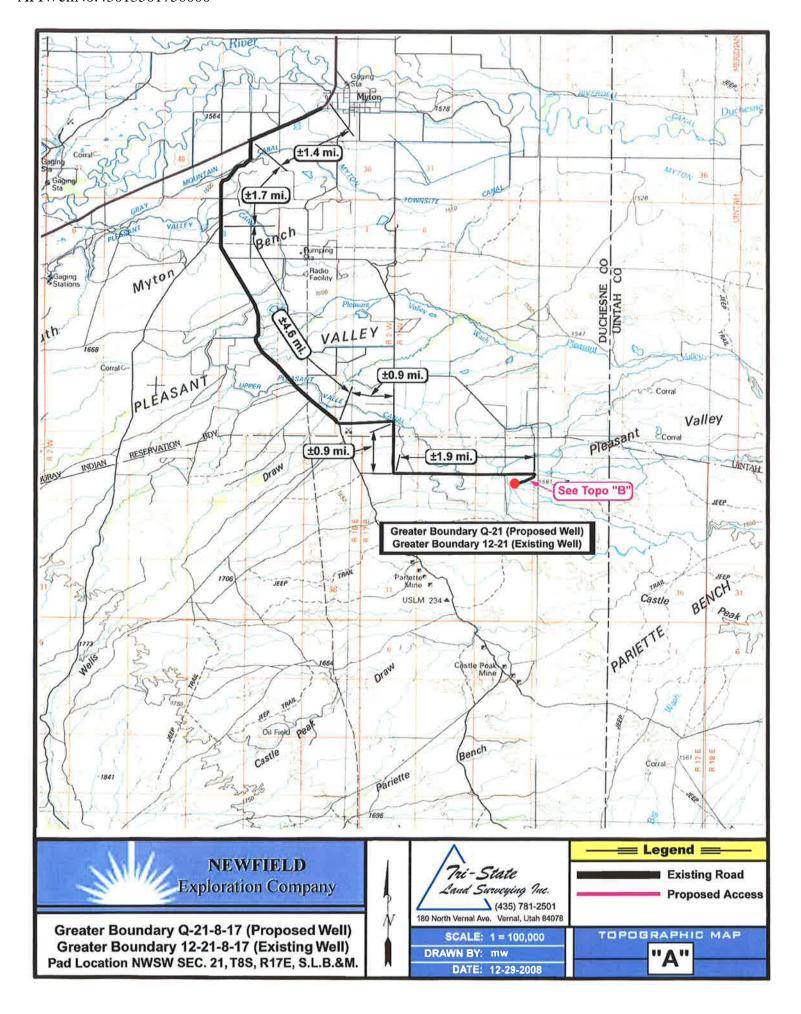
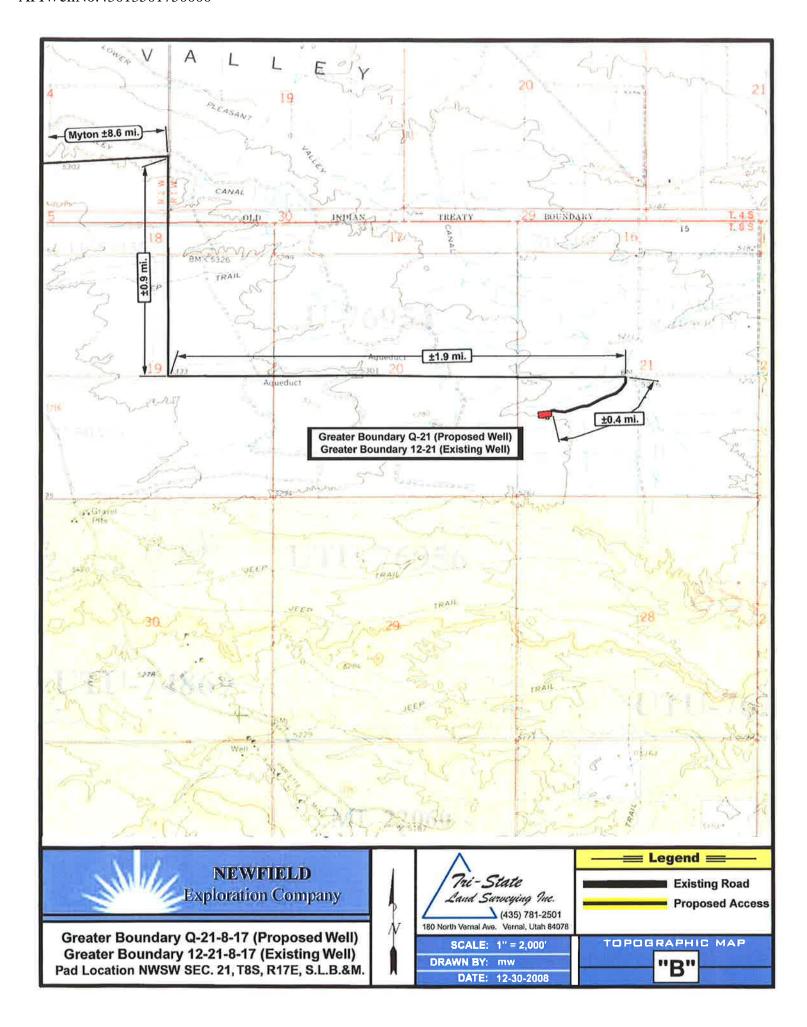
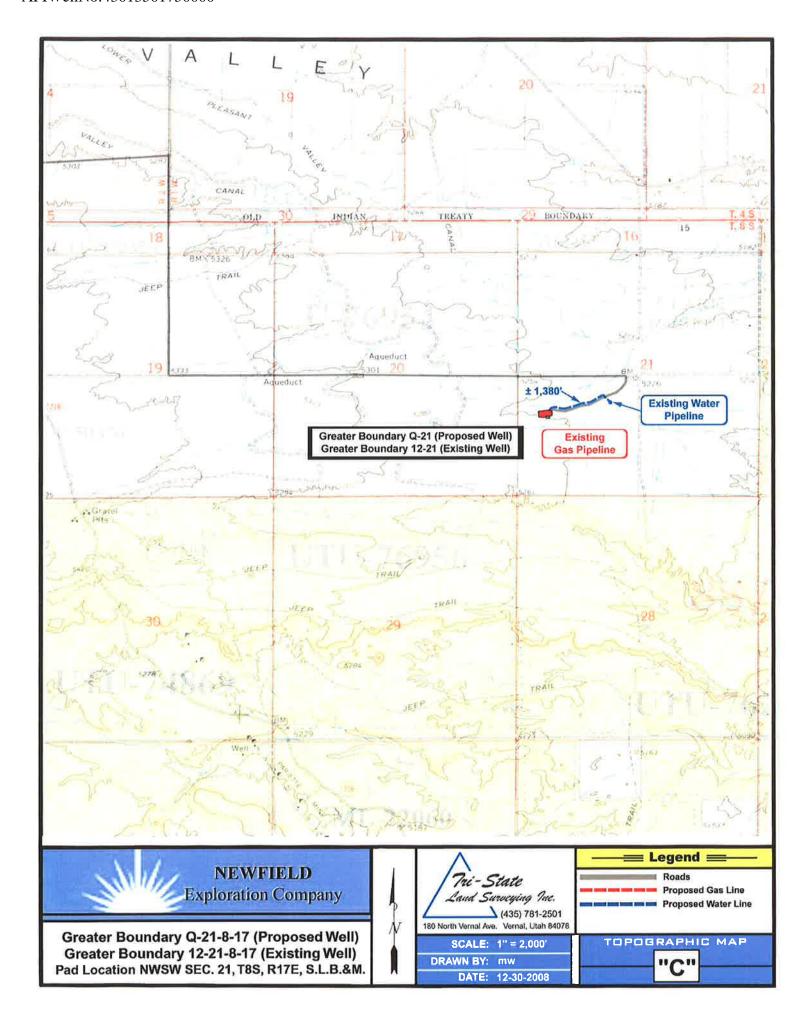


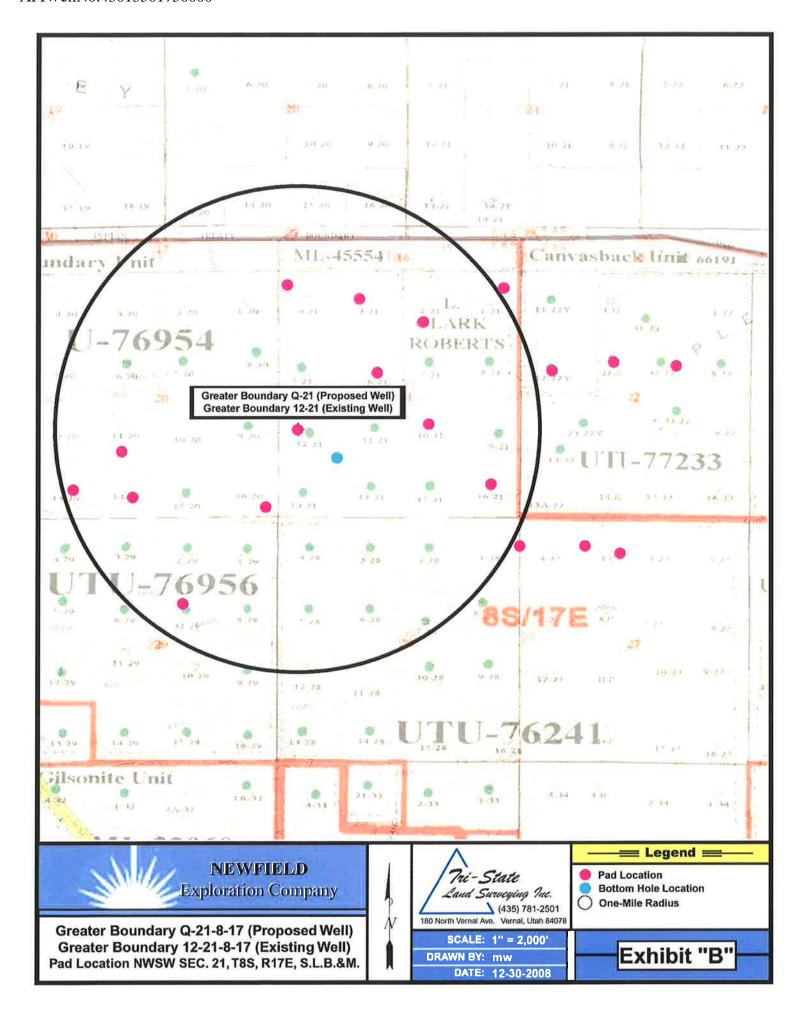
EXHIBIT C







	g	p e	R.	$\overline{}$	2	R2E	• */	2 ,	n	я	n	* [×+	0	T.
9	complete	Producing Gas Well Water Injection Well Dry Hole Temporarily Abandoned	Abandone rce Well osal Well	# GG	я	55.			2	д Д	8	2	ILD TAINS	A Counties	
- 5	Surface Spud Drilling Wasiling on Completion Producing Oil Well	Producing Gas Well Water Injection Well Dry Hole Temporarity Abando		Nigouilines Unicouliines	s U	*1 *2	•7	+3	o d	Y 8 の の	я	я	NEWFIELD SOCKY MOUNTAINS	Exhibit A Dechence a United Counters	R
	9 6 8 •	* / ->-	+ = 4 < 1	4 €	## de	7 71		-3	9)	2	8	7	Z		700 after Serger 5286 (77)
*		2	*	-	j		-	a.	a €	, vi	31	*	*		в В
"	1	2	п	R	* 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		***	•# a	и	я			=:
"	10	ъ П	я	n	/ "	1000	स स्टब्स् स स	·š	n	±i a	h	z.	n	18E	9
×	•.	T4S.		R	Z	3 4 4 4	4 - 14/1 4/14/1	44 44 44 44 44 44 44 44 44 44 44 44 44 4	·f •i	19S.R	÷3	* <u>*</u>		US-K	
9		a.	я	* /	S81	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 7.44 4 7.4 4 7.4 70 4 4	a a +2+1	43 ***	- 4	42 44 48 42 42				
	*	2	2 Y	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	S		4 /24/ 4 /24/ 4 /24/	का का का के बाज्य करू है इंक्ष्य की के	* * *	1 2	n vj	я	-		**
*:	2	2	- 0	8 -5 -7 -5 -2 -5 -2 -7 -5 -2 -7 -5 -7 -	9 ·3 ·1 +2	11.5	** ** ** **	क का के के क क के के क क के के	4 4	And the second s		# 	*		
_			-9	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			4 4 4 54 4 4 54 4 4 54		· · · · · · · · · · · · · · · · · · ·	4.4	+¥ n	×	*		ä
	*	*	2 1 a		710		2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		1 -7	<u> </u>	R	-	-	n
n	2	S-KIN	2 · 2	THE PARTY OF THE P	V.V		17.1				で い の の の の の の の の の の の の の	х		KITE.	9
90	•	¥ :	n -3 -				2 101 01 101 01 01 01			7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7 •1 od a	я		10.5	
a			8	2 2	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				. 2	я			
w		2	2 4	3b 45			级		+1 1 1		4 4 8 4 4 4 4 4 4	5	-		Pr.
38 0	25	2	** ** **	A 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	1811	· 10 10 10 10 10 10 10 10 10 10 10 10 10			1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 4 4 4 4 4 4 4 4 4	1 · 1			+	
	i i	2	я	47.07 \7		(XX		175		4 33 4	4 4	8	-	-	2
•	01	N 20	a	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4 4 4 4 4 4 4 4 4 4 4 4 4	42 2 3 4	*	((54)	Di I	•
		4S-K2	, i	\ a	# # # # # # # # # # # # # # # # # # #	TO A	12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	***	11.50	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	T TO THE STREET	5 †÷		1017	9
•		-02	0.00	+ +	- A			4 4 4	्रा इ.स. इ.स.च्	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12-03 12-03 13-13	я		1103	a
W.		Į,	8	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	R (TOLUMENT OF THE PARTY OF THE PA	63	1 +1 1 /1		And the state of t))))	g	10		•
U			*	4 42 8 24	2 A	SS-R15F			N			5			1
*	a	2		n	+1 ×	•2 LL	12 42 12 4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1		47.0	4429	2 2 2 2 2 2 2 2 2	8	_		2
	=	*-R3W	я	В	n n	* * * * * * * * * * * * * * * * * * * *	12.47	TINE S	41914	1211	4-7 N.7 -8	2		17-1-1	E
a	90	27	a	ħ	×	,	2 2 3	100 M		199 1	1 2 3 1 2 3 1 2 3		VVCXI-	11	9
	(4)	2	- 6	я	я		•	9	2.161	133	100	4 "	50		g p



NEWFIELD PRODUCTION COMPANY GREATER BOUNDARY II FEDERAL Q-21-8-17 AT SURFACE: NW/SW SECTION 21, T8S, R17E DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Boundary II Federal Q-21-8-17 located in the NW 1/4 SW 1/4 Section 21, T8S, R17E, Duchesne County, Utah:

Proceed in a southwesterly direction out of Myton, Utah along Highway 40 approximately $1.4 \pm$ miles to the junction of this highway and Utah State Highway 53; proceed southeasterly approximately 6.3 miles \pm to its junction with an existing road to the east; proceed easterly approximately 0.9 miles \pm to its junction with an existing road to the south; proceed southerly approximately 0.9 miles \pm to its junction with an existing road to the east; proceed easterly approximately 1.9 miles \pm to its junction with an existing road to the southwest; proceed southwesterly approximately 0.4 miles \pm to the existing 12-21-8-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled off of the existing 12-21-8-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent surface equipment will be painted Carlsbad. All facilities will be painted within six months of installation.

5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-7478

Neil Moon Pond

Water Right: 43-11787

Maurice Harvey Pond Water Right: 47-1358

Newfield Collector Well

Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte,

Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), State of Utah approved surface disposal facilities, or Federally approved surface disposal facilities.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See attached Location Layout Sheet.

Fencing Requirements

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

10. PLANS FOR RESTORATION OF SURFACE:

a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. <u>SURFACE OWNERSHIP</u> – John E. Dyer. See attached Surface Use Agreement.

12. OTHER ADDITIONAL INFORMATION

Newfield Production Company requests 1380' of disturbed area be granted to allow for construction of the proposed water lines. It is proposed that the disturbed area will temporarily be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line and 30' wide upon completion of the proposed water lines. Both proposed lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** In the event that the proposed well is converted to a water injection well, a separate injection permit will be applied for through the proper agencies.

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

The Archaeological and Paleontological Report Waiver is attached.

Additional Surface Stipulations

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

Hazardous Material Declaration

Newfield Production Company guarantees that during the drilling and completion of the Greater Boundary II Federal Q-21-8-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Greater Boundary II Federal Q-21-8-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

Representative

Name:

Tim Eaton

Address:

Newfield Production Company

Route 3, Box 3630

Myton, UT 84052

Telephone: (435) 646-3721

Certification

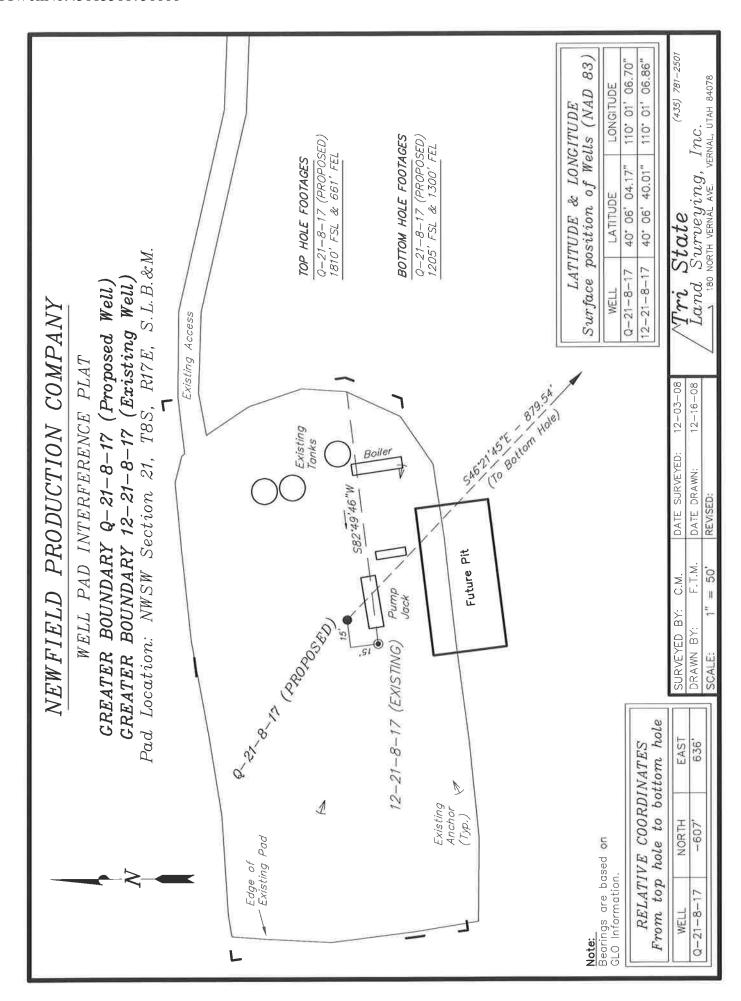
Please be advised that Newfield Production Company is considered to be the operator of well #Q-21-8-17, NW/SW Section 21, T8S, R17E, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

<u>10/27/09</u> Date

Mandie Crozier

Regulatory Specialist Newfield Production Company



NEWFIELD PRODUCTION COMPANY GREATER BOUNDARY Q-21-8-17 (Proposed Well) GREATER BOUNDARY 12-21-8-17 (Existing Well) Pad Location: NWSW Section 21, T8S, R17E, S.L.B.&M. STA. 2+75 Existing PIT TOPSOIL Tanks Treater C/2.3 C/0.1 STA. 2+10 Boiler BENCH Top of Cut Slope WELL HEAD: Pump EXISTING GRADED MOE GROUND = 5250'10 RESERVE 29' (8' Deep) 1 100' STA. 1+57 Existing Well 12-21-8-17 (D)C/0.2 Note: Flare pit is to be located at **EXCESS** least 80' from MATERIAL well head. 57 Existing Anchor (Typ.) Edge of Existing Pad STA, 0+10 STA. 0+00 (6

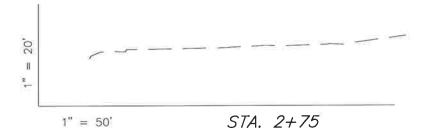
SURVEYED BY: A.C.	DATE SURVEYED:	12-03-08
DRAWN BY: F.T.M.	DATE DRAWN:	12-16-08
SCALE: 1" = 50'	REVISED:	

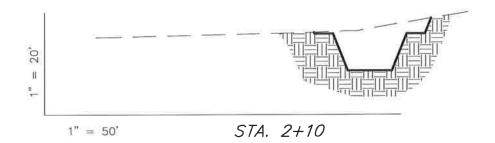
 $egin{array}{lll} egin{array}{lll} egin{array}{lll} Tri & State & {}^{(435)} & {}^{781-2501} \ & Land & Surveying, & Inc. \end{array}$

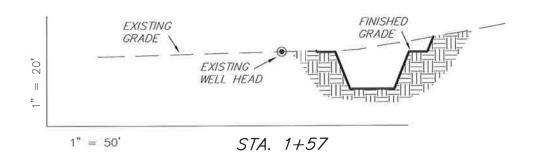
NEWFIELD PRODUCTION COMPANY

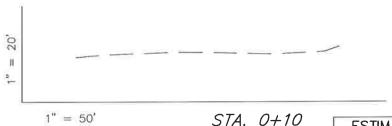
CROSS SECTIONS

GREATER BOUNDARY Q-21-8-17 (Proposed Well) GREATER BOUNDARY 12-21-8-17 (Existing Well)









NOTE: UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1 ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)

(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	360	0	Topsoil is	360
PIT	640	0	in Pad Cut	640
TOTALS	1,000	0	1,030	1,000

SURVEYED BY: A.C.	DATE SURVEYED:	12-03-08
DRAWN BY: F.T.M.	DATE DRAWN:	12-16-08
SCALE: 1" = 50'	REVISED:	

 $egin{array}{ll} egin{array}{ll} Tri & State & {}^{ ext{(435)}} & 781-2501 \ & Land & Surveying, & Inc. \ & ____ & 180 & NORTH & VERNAL & AVE. & VERNAL, & UTAH & 84078 \ \end{array}$

NEWFIELD PRODUCTION COMPANY TYPICAL RIG LAYOUT GREATER BOUNDARY Q-21-8-17 (Proposed Well) GREATER BOUNDARY 12-21-8-17 (Existing Well) Existing Emergency fuel shut down X Г Plant PUMP STORAGE TANK Light gnw) Treater Existing Tanks Water 37 DOG HOUSE WATER TANK YELLOW BASE PARTS HOUSE BENCH RIG Boiler MOE 80, Pump Jack Proposed Well Q-21-8-17 10 TOILET RESERVE (8' Deep) 85' Existing Well 12-21-8-17 100' PIPE RACKS 111 FLARE PIT PIPE RACKS Note: Flare pit is to be located at least 80' from well head. 57 V Existing Anchor (Typ.) Edge of Existing Pad Tri State Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 (435) 781-2501 12-03-08 DATE SURVEYED: SURVEYED BY: A.C. 12-16-08 DRAWN BY: F.T.M. DATE DRAWN: = 50' REVISED: SCALE:

Newfield Production Company Proposed Site Facility Diagram

Greater Boundary II Federal Q-21-8-17

From the 12-21-8-17 Location

NW/SW Sec. 21 T8S, R17E

Duchesne County, Utah

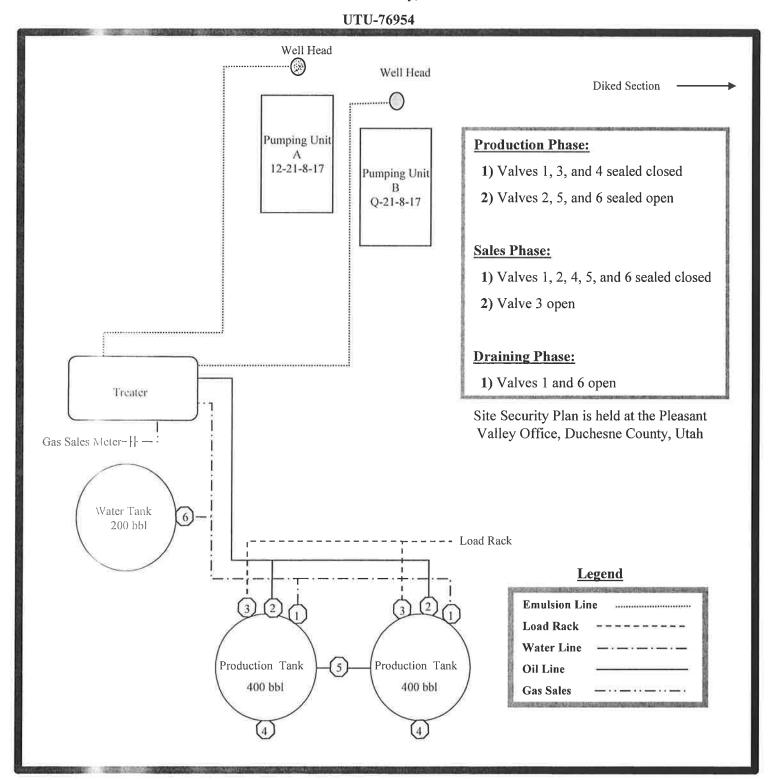


EXHIBIT D

Township 8 South, Range 17 East, S.L.M.

Section 20: NE/4SE/4 Section 21: SW/4 Section 28: N/2NW

Duchesne County, Utah

ARCHAEOLOGICAL & PALEOTOLOGICAL REPORT WAIVER

For the above referenced locations; Boundary Farms, LLC, the Private Surface Owner. (Having a Surface Owner Agreement with Newfield Production Company)

John E. Dyer, representing this entity does agree to waive the request from the State of Utah and Bureau of Land Management for an Archaeological/Cultural and Paleotological Resource Survey for any wells covered by the Surface Use Agreement dated 6/1/2000 between the above said private land owner and Newfield Production. This waiver hereby releases Newfield Production Company from this request.

ohn E. Dyer /\ Dat

Private Surface Owner

Brad Mecham

Newfield Production Company

EXHIBIT D

Township 8 South, Range 17 East, S.L.M.

Section 20: NE/4SE/4 Section 21: SW/4 Section 28: N/2NW

Duchesne County, Utah

ARCHAEOLOGICAL & PALEOTOLOGICAL REPORT WAIVER

For the above referenced locations; Boundary Farms, LLC, the Private Surface Owner. (Having a Surface Owner Agreement with Newfield Production Company)

John E. Dyer, representing this entity does agree to waive the request from the State of Utah and Bureau of Land Management for an Archaeological/Cultural and Paleotological Resource Survey for any wells covered by the Surface Use Agreement dated 6/1/2000 between the above said private land owner and Newfield Production. This waiver hereby releases Newfield Production Company from this request.

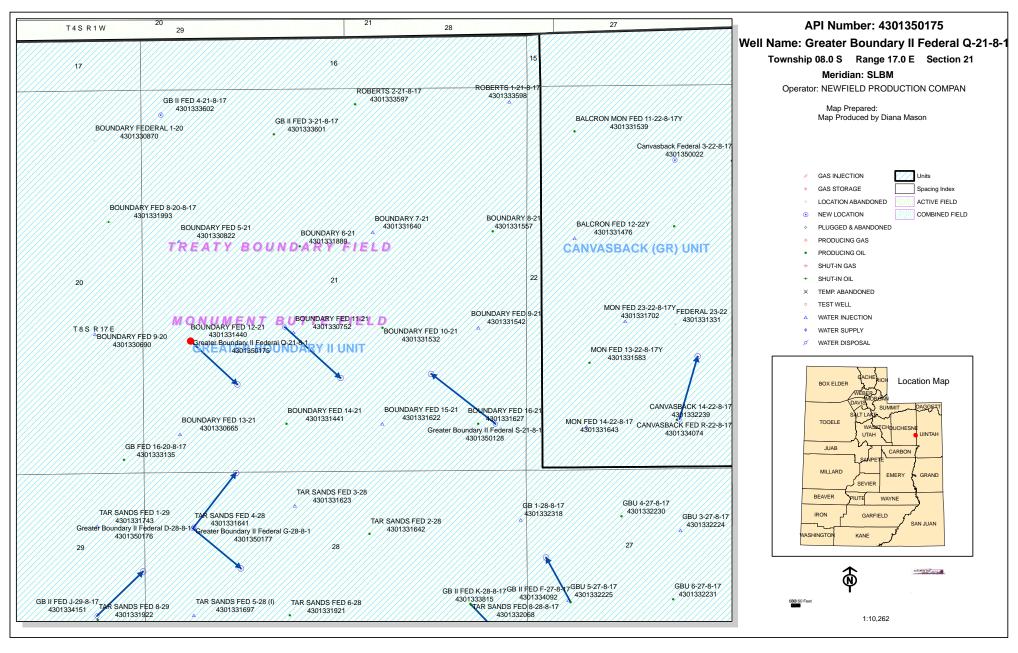
ohn E. Dyer / Date

Private Surface Owner

Brad Mecham

Date

Newfield Production Company



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

October 30, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Greater Boundary II Unit,

Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2009 within the Greater Boundary II Unit, Duchesne County, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50175 Greater Boundary II Q-21-8-17 Sec 21 T08S R17E 1810 FSL 0661 FWL BHL Sec 21 T08S R17E 1205 FSL 1300 FWL

43-013-50176 Greater Boundary II D-28-8-17 Sec 28 T08S R17E 0752 FNL 0682 FWL BHL Sec 28 T08S R17E 0010 FNL 1265 FWL

43-013-50177 Greater Boundary II G-28-8-17 Sec 28 T08S R17E 0768 FNL 0668 FWL BHL Sec 28 T08S R17E 1325 FNL 1323 FWL

We have no objections to permitting the well so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File – Greater Boundary Unit II
Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:10-30-09



December 2, 2009

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE: Directional Drilling

Greater Boundary II Federal Q-21-8-17Greater Monument Butte (Green River) Unit

UTU-76954

Surface Hole: T8S-R17E Section 21: NWSW

1810' FSL 661' FWL

At Target:

T8S-R17E Section 21: SWSW

1205' FSL 1300' FWL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 10/27/09, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield Certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,

Newfield Production Company

Shane Gillespie Land Associate

RECEIVED

2145

DEC 07 2009

DIV. OF OIL, GAS & MINING

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY
Well Name Greater Boundary II Federal Q-21-8-17

API Number 43013501750000 APD No 2145 Field/Unit MONUMENT BUTTE

Location: 1/4,1/4 NWSW Sec 21 Tw 8.0S Rng 17.0E 1810 FSL 661 FWL

GPS Coord (UTM)

Surface Owner John Dyer/Boundary Farms LLC

Participants

Floyd Bartlett (DOGM), Tim Eaton, (Newfield Production Co.), Cory Miller and Cameron Stewart (Tri-State Land Surveying).

Regional/Local Setting & Topography

The proposed Greater Boundary II Q-21-8-17 oil well is a directional well to be drilled from the existing pad of the Greater Boundary II 12-21-8-17 producing oil well. No changes to the previously disturbed area are planned. The reserve pit will be re-dug in approximately the original location on the southeast side of the pad. It however will be moved north 15 feet within the previous disturbance to provide the 29 feet needed between well bore and the reserve pit. The well is on a 20-acre spacing.

A field review of the existing pad showed no concerns as it now exists and should be a suitable for drilling and operating the proposed additional well.

Mr. John Dyer owns the surface. The United States Government owns the minerals.

Surface Use Plan

Current Surface Use

Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

Width Length

Ancillary Facilities

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands

Flora / Fauna

Existing well pad.

Soil Type and Characteristics

Erosion Issues

Sedimentation Issues

Site Stability Issues

Drainage Diverson Required?

12/14/2009 Page 1

Berm Required?

Erosion Sedimentation Control Required?

Paleo Survey Run? Paleo Potental Observed? Cultural Survey Run? Cultural Resources?

Reserve Pit

Site-Specific Factors	Site R	anking	
Distance to Groundwater (feet)	75 to 100	10	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	45	1 Sensitivity Level

Characteristics / Requirements

The reserve pit will be re-dug in approximately the original location on the southeast side of the pad. It however will be moved north 15 feet within the previous disturbance to provide the 29 feet needed between well bore and the reserve pit. Its dimensions are 80' x 40' x 8' deep. A 16-mil liner with an appropriate sub-liner is required.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y

Other Observations / Comments

Evaluator	Date / Time
Floyd Bartlett	6/25/2009

12/14/2009 Page 2

12/14/2009

Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner CBM	
2145	43013501750000	LOCKED	OW	P No	
Operator	NEWFIELD PRODUCTION	N COMPANY	Surface Owner-A	APD John Dyer/Boundary Farms LLC	S
Well Name	Greater Boundary II Federal	Q-21-8-17	Unit	GMBU (GRRV)	
Field	MONUMENT BUTTE		Type of Work	DRILL	
Location	NWSW 21 8S 17E S	1810 FSL	661 FWL GPS Coord	d (UTM) 583720E 4439244N	Ţ
Geologic Stat	ement of Basis				

The mineral rights for the proposed well are owned by the Federal Government. The BLM will be the agency responsible for evaluating and approving the drilling, casing and cementing programs.

Brad Hill 11/9/2009 **APD Evaluator Date / Time**

Surface Statement of Basis

The proposed Greater Boundary II Q-21-8-17 oil well is a directional well to be drilled from the existing pad of the Greater Boundary II 12-21-8-17 producing oil well. No changes to the previously disturbed area are planned. The reserve pit will be re-dug in approximately the original location on the southeast side of the pad. It however will be moved north 15 feet within the previous disturbance to provide the 29 feet needed between well bore and the reserve pit. The well is on a 20-acre spacing.

A field review of the existing pad showed no concerns as it now exists and should be a suitable for drilling and operating the proposed additional well.

Mr. John Dyer owns the surface. Three messages were left on Mr. Dyer's telephone answering machine informing him and inviting him to the pre-site evaluation. No return answer was received. Mr. Dyer did call on 6/29/2009 following the pre-site. He was informed as to the plans and seemed to have no significant concerns. The United States Government owns the minerals. Mr. James Hereford of the BLM was invited by email and telephone to the pre-site. He did not attend.

The reserve pit will be re-dug in approximately the original location on the southeast side of the pad. It however will be moved north 15 feet within the previous disturbance to provide the 29 feet needed between well bore and the reserve pit. Its dimensions are 80' x 40' x 8' deep. A 16-mil liner with an appropriate sub-liner is required

Floyd Bartlett 6/25/2009
Onsite Evaluator Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition

Pits A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the

reserve pit.

Surface The well site shall be bermed to prevent fluids from leaving the pad.

Surface The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	10/27/2009		API NO. ASSIGNED:	43013501750000
WELL NAME:	Greater Boundary II Fed	deral Q-21-8-17		
OPERATOR:	NEWFIELD PRODUCTION	N COMPANY (N2695)	PHONE NUMBER:	435 646-4825
CONTACT:	Mandie Crozier			
PROPOSED LOCATION:	NWSW 21 080S 170E		Permit Tech Review:	
SURFACE:	1810 FSL 0661 FWL		Engineering Review:	
воттом:	1205 FSL 1300 FWL		Geology Review:	
COUNTY:	DUCHESNE			
LATITUDE:	40.10122		LONGITUDE:	-110.01779
UTM SURF EASTINGS:	583720.00		NORTHINGS:	4439244.00
FIELD NAME:	MONUMENT BUTTE			
LEASE TYPE:	1 - Federal			
LEASE NUMBER:	UTU-76954 PRO	OPOSED PRODUCING FO	RMATION(S): GREEN RIV	ER
SURFACE OWNER:	4 - Fee		COALBED METHANE:	NO
RECEIVED AND/OR REVIEW	WED:	LOCATION AND SI	TING:	
PLAT	• • • • • • • • • • • • • • • • • • • •	R649-2-3.	.11110.	
_		,—		
▶ Bond: FEDERAL - WYB00)0493	Unit: GMBU (GF	RRV)	
Potash		R649-3-2. Ge	neral	
Oil Shale 190-5				
Oil Shale 190-3		№ R649-3-3. Ex	ception	
Oil Shale 190-13		Drilling Unit		
✓ Water Permit: 43-7478		Board Cause	No: Cause 213-11	
RDCC Review:		Effective Da	te: 11/30/2009	
▶ Fee Surface Agreemen	t	Siting: 460'	fr unit boundary	
Intent to Commingle		⊮ R649-3-11. D	irectional Drill	
Commingling Approved				
Comments: Presite Con	mpleted			
Stipulations: 1 - Except	tion Location - dmason			

1 - Exception Location - dmaso
4 - Federal Approval - dmason
5 - Statement of Basis - bhill
15 - Directional - dmason
27 - Other - bhill

API Well No: 43013501750000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Greater Boundary II Federal Q-21-8-17

API Well Number: 43013501750000 Lease Number: UTU-76954 Surface Owner: FEE (PRIVATE) Approval Date: 12/14/2009

Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

API Well No: 43013501750000

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For Gil Hunt Associate Director, Oil & Gas

Spuc BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross # 29 Submitted By Ryan Crum Phone Number 823-7065 Well Name/Number Greater Mark Butte Boundary II Q 21 8 1 Qtr/Qtr NW/SW Section 21 Township 8s Range 17e Lease Serial Number UTU-76954 API Number 43-013501750000 Spud Notice — Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time <u>7/2/10</u> <u>8:00</u> AM ⊠ PM □
Casing — Please report time casing run starts, not cementing times. Surface Casing Intermediate Casing Production Casing Liner Other
Date/Time <u>7/2/10</u> <u>2:00</u> AM ☐ PM ⊠
Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other Date/Time AM PM
Remarks

FORM 3160-5 . (August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

	OMB No. 1004-0137 Expires: July 31,2010
Lease Serial	

FORM APPROVED

Type of Well	o re-enter an uch proposals.	USA	nse Serial No. LUTU-76954 Indian, Allottee on	Tribe Name.			
Do not use this form for proposals to drill or to abandoned well. Use Form 3160-3 (APD) for sure SUBMIT IN TRIPLICATE - Other Instruction Type of Well	o re-enter an uch proposals.	6. If In		Tribe Name.			
Type of Well	ons on page 2	- vovi		6. If Indian, Allottee or Tribe Name.			
Type of Well	SUBMIT IN TRIPLICATE - Other Instructions on page 2						
Type of well		GMB	GMBU				
Oil Well Gas Well Other Name of Operator			8. Well Name and No. GRTR BNDRY II Q-21-8-17				
NEWFIELD PRODUCTION COMPANY		<u></u>	Well No.				
Address Route 3 Box 3630 3b. Phone	e (include are code)		350175				
Myton, UT 84052 435.64				Exploratory Area			
Location of Well (Footage, Sec., T., R., M., or Survey Description)		GRE	ATER MB UNI	Т			
		11. Co	unty or Parish, S	itate			
Section 21 T8S R17E		DUC	CHESNE, UT				
12. CHECK APPROPRIATE BOX(ES) TO IN	NIDICATE NATUR	E OF NOTICE	E, OR OTHE	R DATA			
TYPE OF SUBMISSION	TYPE OF .	ACTION					
Acidize Deep	pen 🔲	Production (Start	/Resume)	Water Shut-Off			
Nation of Intent	cture Treat	Reclamation		Well Integrity			
<u> </u>	v Construction	Recomplete	X				
2 Subsequent Report	g & Abandon	Temporarily Aba	-	Spud Notice			
	g Back	Water Disposal		4			
rrect (Printed/ Typed) Don Bastian	Title Drilling Foreman Date						
	07/07/2010						
Von Daslian							
THIS SPACE FOR FEDE	ERAL OR STATE	OFFICE US	E				
		OFFICE US					
THIS SPACE FOR FEDE opproved by the conduct operations of approval, if any, are attached. Approval of this notice does not warrant or triffy that the applicant holds legal or equitable title to those rights in the subject lease nich would entitle the applicant to conduct operations thereon. The 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any personal triple of the subject lease of the subject	TitleOffice		Date				

(Instructions on page 2)

JUL 1 2 2010

NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

,			0.5/011	0 4 O N O O C T A T		254.47			
			8 5/8"	CASING SET AT		351.17			
LAST CASING	14"	SET AT	20		OPERATO	R	Newfield i	Exploration	Company
DATUM					WELL	GRTR BN	IDRY II Q-2	21-8-17	
DATUM TO CUT			12.00		FIELD/PRO	SPECT	Monumer	t Butte	
DATUM TO BRA					CONTRAC	TOR & RIG	; #	Ross Rig #2	29
TD DRILLER									
HOLE SIZE	12 1/4"								
LOG OF CASING	STRING:				T.:		T	001107	I LENGTH
PIECES	OD	ITEM - M	AKE - DESC	RIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
11		Well Head						A	0.95
88	8 5/8"		ng (shoe Jt	39.70')	24#	J-55	STC	A	339.32
11		Guide Sho	<u>e</u>					Α	0.9
		<u> </u>							
······································							 		
		<u> </u>							
	ļ.——								
									
							ļ		
						<u> </u>			
		<u> </u>							
	<u> </u>	 			 		 		<u> </u>
		Ĺ			TOTAL LE	NOTH OF			341.17
CASING INVEN			FEET	JTS	TOTAL LENGTH OF STRING LESS CUT OFF PIECE				
TOTAL LENGTH		G	341.17	8	-			C	12
LESS NON CSG			1.85 0	0	PLUS DATUM TO T/CUT OFF CSG CASING SET DEPTH				
PLUS FULL JTS				8	JOAGING 3				351.17
TOTAL OOO DE		IDDC)	339.32	<u> </u>	COMPARE				
TOTAL CSG. DE		IKD9)	339.32		1) COMP	AINE.			
	riming	Coud	8:00 AM	7/2/2010	GOOD CIE	C THRILL	ОВ	Yes	
BEGIN RUN CS CSG. IN HOLE	J	Spud	3:00 PM	7/2/2010			URFACE		
BEGIN CIRC			9:55 AM	7/3/2010	!		No No		
BEGIN CIRC	MT		10:02 AM	7/3/2010	1				

10:11 AM

10:18 AM

BEGIN DSPL. CMT

PLUG DOWN

7/3/2010

7/3/2010

BUMPED PLUG TO 120

CEMENT USED			BJ Services						
STAGE	# SX		CEMENT TYPE & ADDITIV	/ES					
1	160	Class G + 2% calcium Chloride + 0.25# Cello Flake @ 15.8 ppg w/1.17 yield							
·									
									
·									
									
····									
									
		<u> </u>							
									
			· · · · · · · · · · · · · · · · · · ·						
		HER PLACEMENT		SHOW MAKE & SPACING					
Middle 1st to	p 2nd & 3rd	For total of 3							

Don Bastian

COMPANY REPRESENTATIVE

DATE **7/3/2010**

ACTION

OPERATOR: NEWFIELD PRODUCTION COMPANY ADDRESS: RT. 3 BOX 3630

MYTON, UT 84052

OPERATOR ACCT. NO.

N2695

Jentri Park

07/19/10 Date

Production Clerk

ACTION CODE	CURRENT	NEW	API NUMBER	WELL NAME	Τ						
CODE	ENTITY NO.	ENTITY NO.	/	• • •	QQ	SC	WELL L	OCATION	COUNTY	SPUD DATE	EFFECTIVE DATE
	*****			GREATER MONUMENT		310	8			- JA112	DATE
В	99999	17400	4301350210	BUTTE C-1-9-16	SESW	X	ø s	16E	DUCHESNE	6/25/2010	17/26/10
WELL 1 C	OMMENTS:				1		70	100	DOCTICSIVE	0/25/2010	1/30/10
ŀ	GRRU			4							, ,
ì	GKKU			BHL = See 1	Tac	1 41/	UNC				**************************************
ACTION	CURRENT	NEW			1 70	146	0742				
CODE	ENTITY NO.	ENTITY NO.	API NUMBER	WELL NAME			LL LOCAT			SPUD	EFFECTIVE
					99	SC	TP	RG	COUNTY	DATE	DATE
Α	99999	17693	4004750000		İ						1 , ,
	33333	11015	4304750986	HANCOCK 4-23-4-1	NWNW	23	48	1W	UINTAH	7/1/2010	7/20/10
	0 001			-		****	· · · · · · · · · · · · · · · · · · ·				1 // 51 / / 5
1	GRRV										
1											
ACTION CODE	CURRENT ENTITY NO.	NEW	API NUMBER	WELL NAME					······································		
CODE	ENTITY NO.	ENTITY NO.	,		QQ	sc	I IP	OCATION RG	COUNTY	SPUD DATE	EFFECTIVE
				GREATER BOUNDARY II							
В	99999	17400	4301350175	FED Q-21-8-17	NWSW	21	00	470	BUOLEDIE		11/01/
			1001000110	700 921-0-17	MAASAA	21	88	1/E	DUCHESNE	7/2/2010	1/20/10
	COOL										7
	GRRV			BHL=SW	SIO						
				DIVC- Sec							
ACTION	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME			WELL	OCATION		SPUD	EFFECTIVE
		Cittorino.	· · · · · · · · · · · · · · · · · · ·		QQ	SC	TP	RG	COUNTY	DATE	DATE
Α	99999	17694	42047500040								~///
<u> </u>		11/0/7	4304750980	UTE TRIBAL 6-23-4-1	SENW	23	45	1W	UINTAH	7/3/2010	7/26/10
	GRRV										<u> </u>
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			WELL L	OCATION		SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.			QQ	SC	TP	RG	COUNTY	DATE	DATE
		l			Í						
A	99999	17695	4304750945	HANCOCK 9-24-4-1	NESE	24	48	1W	IUALTALI	7/4/0040	7/01/10
	OMMENTS:	11	1001100010	11/11/00/01/5-24-4-1	INESE	24	45	144	UINTAH	7/4/2010	1/30/10
								•			/ / /
	GRRV										· · · · · · · · · · · · · · · · · · ·
10751		T									
ACTION	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME		·		OCATION		SPUD	EFFECTIVE
		ENTIT RO.			QQ	sc	TP	RG	COUNTY	DATE	DATE
1 .		101 01									
A	99999	17696	4301350271	UTE TRIBAL 2-19-4-1	NWNE	19	45	1W	DUCHESNE	7/6/2010	17/26/10
WELL 5	OMMENTS:					<u> </u>				71012010	11/40/10
1	CAMI								<u>.</u>		(
	UTUKU								L	11.	
L											
ACTION (CODES (See instructions on bac	k of form)									

B - 'well to existing entity (group or unit well)

E - ther (explain in comments section)

C - from one existing entity to another existing entity D - well from one existing entity to a new entity

RECEIVED

JUL 1 9 2010

STATE OF UTAH

(This space for State use only)

	DEPARTMENT OF NATURAL RE DIVISION OF OIL, GAS AND		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-76954
SUNDRY	NOTICES AND REPO	RTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	ll new wells, significantly deepen existing wells below the second of th		7. UNIT OF CA AGREEMENT NAME: GMBU
1. TYPE OF WELL: OIL WELL	GAS WELL OTHER		8. WELL NAME and NUMBER: GRTR BNDRY II Q-21-8-17
2. NAME OF OPERATOR:	W-1000 - 1000 -		9. API NUMBER:
NEWFIELD PRODUCTION COM	PANY		4301350175
3. ADDRESS OF OPERATOR: Route 3 Box 3630	CITY Myton STATE UT	PHONE NUMBER 2IP 84052 435.646.3721	10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 1810 F	St 0661 FWL		COUNTY: DUCHESNE
OTR/OTR. SECTION, TOWNSHIP, RANGE, N	AERIDIAN: , 21, T8S, R17E		STATE: UT
II. CHECK APPROP	RIATE BOXES TO INDICATE	NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will	CASING REPAIR	NEW CONSTRUCTION	TEMPORARITLY ABANDON
Approximate date work win	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLAIR
X SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
SUBSEOUENT REPORT (Submit Original Form Only)		<u> </u>	
Date of Work Completion:	CHANGE WELL STATUS	PRODUCTION (START/STOP)	WATER SHUT-OFF
	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	X OTHER: - Weekly Status Report
07/30/2010	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	·
	MPLETED OPERATIONS. Clearly show all completed on 07/30/10, attached is		volumes, etc.
No.			
NAME (PLEASE PRINT) Lucy Chavez-Na	upoto	TITLE Administrative As	ssistant
SIGNATURE Aver	Day of Sea	DATE 08/02/2010	<u> </u>

RECEIVED AUG 1 1 2010

Daily Activity Report

Format For Sundry GRTR BNDRY II Q-21-8-17 5/1/2010 To 9/30/2010

7/19/2010 Day: 1

Completion

Rigless on 7/19/2010 - Run CBL & perforate stage #1. - Install 5m frac head. NU 6" 5K Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head, csg & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6593' & cement top @36 '. Perforate stage #1, CP4 sds @ (6403'-10') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for total of 21 shots. CP4 sds @ (6385'-87') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for total of 6 shots. CP4 sds @ (6374'-76') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for total of 6 shots. RD H/O truck & The Perforators WLT & mast. Wait on frac crew

Daily Cost: \$0

Cumulative Cost: \$12,660

7/22/2010 Day: 2

Completion

Rigless on 7/22/2010 - MIRU PSI WL & Bj Services. Frac 1st stage. Perforate & frac remaining 4 stage. Flowback well for 5 1/2 hrs. Turned to oil. SIWFN w/ 1120 BWTR. - MIRU PSI WL & Bj Services. Frac 1st stage. Perforate & frac remaining 4 stage. Flowback well for 5 1/2 hrs. Turned to oil. SIWFN w/ 1120 BWTR.

Daily Cost: \$0

Cumulative Cost: \$94,787

7/27/2010 Day: 3

Completion

WWS #1 on 7/27/2010 - Set kill plug. MIRU WWS #1. Change out BOP & WH. Talley, PU & RIH w/ 4 3/4" chomp bit & 100 jts of 2 7/8" J-55 tbg. EOT @ 3069'. SIWFN w/ 1105 BWTR. - 500 psi on well. MIRU Perforators LLC WLT, crane & lubricators. Hot oiler pumped 10 BW down csg. RIH w/ weatherford solid composite kill plug. Set plug @ 4716'. RD WL. MIRU WWS #1. Bleed off well. ND Camerons BOP & 5M WH. NU 3M WH & Schaffer BOP. Talley, PU & RIH w/ 4 3/4" chomp bit & 100 jts of 2 7/8" J-55 tbg. EOT @ 3069'. SIWFN w/ 1105 BWTR.

Daily Cost: \$0

Cumulative Cost: \$104,805

7/28/2010 Day: 4

Completion

WWS #1 on 7/28/2010 - Drill out plugs. C/O to PBTD. LD 2 jts of tbg. RU swab equipment. Made 3 swab runs. SIWFN w/ 1155 BWTR. - Continue PU tbg. Tagged kill plug @ 4730'. RU Nabors power swivel. Drill out plugs. Kill plug @ 4730', Drilled up in 32 mins. Tagged sand @ 4786', Plug @ 4900' (Drilled out in 30 mins). Plug @ 5560' (Drilled out in 34 mins). Plug @ 5935' (Drilled out in 42 mins). Tagged fill @ 6228', Plug @ 6285' (Drilled out in 20 mins). Tagged fill @ 6502', C/O to PBTD to 6643'. RD power swivel. LD 2 jts. RU swab equipment. IFL @ surface. Made 3 swab runs. Rec 50 BTF. SIWFN w/ 1155 BWTR.

Daily Cost: \$0

Cumulative Cost: \$150,047

7/29/2010 Day: 5

Completion

WWS #1 on 7/29/2010 - Swab. C/O to PBTD. TOH w/ tbg. LD bit. TIH w/ production tbg. TA would not set. TOH w/ 150 jts of tbg. - 50 psi on tbg, 100 psi on tbg. Continue swab. Made 9 runs. Rec 145 BTF. FFL @ 600'. TIH w/ 2 jts of tbg. C/O to PBTD. LD 6 jts. TOH w/ 210 jts. LD 4 3/4" bit. TIH w/ production tbg. ND BOP. Try to set TA. No luck. Land tbg. Flush tbg w/ 60 BW. Unland tbg. Try to set TA. Would not set. NU BOP. TOH w/ 150 jts of tbg. SIWFN w/ 1215 BWTR.

Daily Cost: \$0

Cumulative Cost: \$156,225

7/30/2010 Day: 6

Completion

WWS #1 on 7/30/2010 - Continue TOH w/ tbg. PU new TA. TIH w/ tbg. ND BOP. Set TA. NU WH. PU & RIH w/ "A" grade rod string. Hang head, Space out rods. Pressure test to 800 psi. RDMOSU. POP @ 4:00 PM w/ 144" SL @ 5 SPM. 1218 BWTR. - 0 psi on well. Continue TOH w/ tbg. PU new TA. TIH w/ tbg same as pulled: NC, 2-jts, SN, 1 jt, TA, 207 jts of tbg. ND BOP. Set TA w/ 18,000#'s of tension. NU WH. PU & RIH w/ "A" grade rod string as follows: Central hydraulic 2 1/2" X 1 3/4" X 20' X 24' RHAC, 4- 1 1/2" wt bars, 250- 7/8" Guided rods (8 per), 1-8', 1-4', 1-2' X 7/8" pony rods, 1 1/2" X 30' polish rod. Hang head, Space out rods. Fill tbg w/ 3 bbls of wtr. Pressure test to 800 psi w/ unit. RDMOSU. POP @ 4:00 PM w/ 144" SL @ 5 SPM. 1218 BWTR. Final Report. **Finalized**

Daily Cost: \$0

Cumulative Cost: \$195,707

Pertinent Files: Go to File List



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

5. Lease Serial No.

\A/E i	COMBI ETION		I FTION REPORT	CANDIOC
VVCLL	COMPLEHON	4 UK KEUUNIE	LEIBIN KEEUKI	

	~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	······································	······································		······							บาบ	-7695	4	
la. Type of	Well	Δo	il Well		Gas Well	Dry Deepen	Other		c n.				6. 15	Indian,	Allottee or T	ribe Name
o. 1 ype of	completion		ew Well her:		work Over	☐ Dcepen ☐	riug Back	LJ Dif	. Kesvr.	•					'A Agreement	Name and No.
2. Name of NEWFIEL	Operator							*** ***-		 -			GME 8. Le		me and Well	No.
	D'EXPLO	RATION	1 COM	PANY									GRE	ATER	BOUNDAR	RY II Q-21-8-17
3. Address	1401 17TH S						- (a. Phone i (435)646		ude ar	ea cod	?)		FI Well 13-50		
1 Location	of Well (R	eport loc	ation cl	early an	d in accord	ance with Federa	l requireme	BH1	<u></u>	<u> - </u>	110				d Pool or Exp R MB UNIT	oloratory
At surfac	° 1810' F	SI & 66	1' FW	(NW/	SW) SEC	21, T8S, R17	= (1.1T1.1-76	(954)	- 1	\sim 1	M	m	II S	ec T	R M on R	lock and
				_ (,	,,,,	- (0 (0) (,,,					s	urvey (or Area SEC.	21, T8S, R17E
At top pro	d. interval	reported	below	1269' F	SL & 122	B' FWL (SW/SV	V) SEC. 2	1, T8S, F	R17E (l	JTU-7	(6954	1			or Parish	13. State
. At total de	mth 1011	'FSL &	1493'	FWL (S	SE/SW) SI	EC. 21, T8S, R	17E (UTU	J-76954)					DUC	HESN	1E	UΤ
14. Date Sp	udded		15.	Date T	.D. Reached		16,	Date Com							ns (DF, RKE	B, RT, GL)*
07/02/201 18. Total D		6700		7/10/20		g Back T.D.: N	4D 6643'	D&A		,	o Prod	idge Plug		O' GL MD	5262' KB	
	TV	D 65 69	182			Т	عن dv	30		J	•			rvd		
21. Type E						y of each) EUTRON,GR,C	ALIDED	<u></u> ጉለተ		1	Was wel Was DS	l cored? I' run?	Z No		Yes (Submit Yes (Submit	•
23. Casing							WILE C.	OIVIT DO	14D			nal Survey			Yes (Submit	
. Hole Size	Size/Gra		VI. (#/II.		op (MD)	Bottom (MD)		Comenter		of Sks		Shurry		Cem	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-		4#	0	-1- ()	351'	De	epth	Турс 160 С	of Co		(BB	(-)			
7-7/8"	5-1/2" J		5.5#	0		6688'			325 P	··············				36'		
									425 5	0/50 F	POZ					
						<u> </u>		_,,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ļ							
				+-										,		
24. Tubing	Record					<u> </u>			L							
Size		Set (MD)		ker Dep		Síze	Depth S	et (MD)	Packer	Depth :	(MD)	Size	-	Dept	h Set (MD)	Packer Depth (MD)
2-7/8" 25. Produci		<u>) 6458'</u>	I I A (c	0 6364			26. Pe	rforation	Record	47	د ۱ر	`	L			
A \ O	Formatio	1)		ï	op	Bottom		rforated In			 	Size	No. H	oles		Perf. Status
A) Green I				······································				410' CP4			.36"		3		33	
C) Green								218' CP. 853' A1.			.34"		3		27	······································
D) Green							5480-5				.34"		3	······································	15	
27. Acid, F		···	cment .	Squeeze	, etc.				Amount	and Th		Antorial				
6374-6410	Depth Inter)'	vai		rac w/	19670#'s	20/40 sand in	171 bbls (pe or i	nateriai			·	
6171-6218	3'					20/40 sand in			-77							
5817-5853	}'		~~~~~~			20/40 sand in	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~									
5480-5489 28, Product		al A		Frac w/	15246#'s	20/40 sand in	130 bbls (of Lightni	ng 17 f	luid.						
Date First	r	Hours	l'est		Oil		Vater	Oil Gra	,	Ga			uction Me		· · · · · · · · · · · · · · · · · · ·	. , , , , , , , , , , , , , , , , , , ,
Produced		Tested	Prod	uction	BBL	1 1	BL	Corr. Al	PΙ	Gr	avity	2-1/	'2" x 1-3	/4" x 2	20' x 24' RH	AC Pump
7-29-10	8-16-10 Tbg. Press.	24	24.5		Oil		14 Valer	Gas/Oil		327	ell Stati					
Choke Size	Flvg,	Press.	24 F Rate		BBL		BL	Ratio		- 1		CING				
	SI		-	→												
28a. Produc	~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1		10:1	<u> </u>		15:1:-		— 						
Date First Produced	Test Date	Hours Tested	Test Prod	uction	Oil BBL		Vater BL	Oil Grav Corr. Al		Ga Gr	s avity	Prod	uction M	ethod		
				→]					•					
Choke	Tbg. Press.		24 1		Oil		/ater	Gas/Oil		W	ell State	ıs				
Size	Flwg. Sl	Press.	Rate		BBL	MCF B	BL	Ratio							-0EW	/FD
*(See instr	uctions and	ennear C	or neblis	onal dat	2 00 0000 3	Į.			*****					R	CEIV	
tace men	ฉะดอกร สก ต	spaces II	ด สนเม	viiai Udl	a ou page 2	,										

AUG 1 © 2010

29h Brod	uction - Inte	muol C	······································							
	Test Date	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method	
Produced		Tested	Production	BBL	MCF	BBL	Corr. API	Gravity		
	<u></u>									
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
011.0	SI	1055.			11101					
39 - Dead		ID		<u>. l</u>						<u> </u>
	action - Intel Test Date	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method	
Produced		Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	,	
				1						
	Tbg. Press.		24 Hr.	Oil	Gas	Water	Gas/Oil	Well Status		
Size	Flwg. Sl	Press.	Rate	BBL	MCF	BBL	Ratio			
	Γ'		→		ł					
29. Dispos	sition of Gas	s (Solid, u	sed for fuel, ve	ented, etc.)					
USED FOR	FUEL									
30. Sumn	nary of Poro	us Zones	(Include Aqui	ifers):				31. Formati	on (Log) Markers	······································
Show	II important	t annae of	narasity and a	ontante th	areof Cored	intervale and al	Il drill-stem tests,			
						ing and shut-in		GEOLOGI	ICAL MARKERS	
recover	ries.				•	_				
r		T								Тор
Forn	nation	Тор	Bottom		Des	criptions, Conte	ents, etc.		Name	
!		<u> </u>								Meas. Depth
		ł						GARDEN GU		4264'
								GARDEN GU	LCH 1	4459'
* 3								GARDEN GU	LCH 2	4582'
+ * **								POINT 3		4869
								X MRKR		5106'
								Y MRKR		5143'
								DOUGALS C	REEK MRK	5279'
								BI CARBONA	ATE MRK	5541'
								B LIMESTON	IMRK	5704'
								CASTLE PEA	AK	6150'
								BASAL CARE	BONATE	6570'
32. Addit	ional remarl	ks (include	e plugging pro	cedure):					•	
Stage 5:	Green Ri	iver Forn	nation (GB4	& GB6)	4773-4826	, .34" 3/30	Frac w/ 36953#	s of 20/40 sand	I in 238 bbls of Lightning 17	7 fluid
,										
33. Indica	te which ite	ems have t	een attached b	y placing	a check in the	e appropriate be	oxes:			
∏ Elec	ctrical/Mech	anical Log	s (I full set req	'd.)		Geologic Repo	on DST	Report	☑ Directional Survey	
		_	g and cement ve			Core Analysis		· : Drilling Daily	Activity	
						mplete and corr			ecords (see attached instruction	ıs)*
N	lame <i>(please</i>	e print) L	ucy Chavez-	Naupoto)		Title Adminis	trative Assistar	nt .	A Marie of a state of the state
s	ignature	Ju	<u>50</u>	~~~	KD D		Date 08/11/20	10		
						it a crime for a		y and willfully to	make to any department or age	ency of the United States any
, 11411										

(Continued on page 3)



NEWFIELD EXPLORATION

USGS Myton SW (UT) SECTION 21 T8S, R17E Q-21-8-17

Wellbore #1

Design: Actual

Standard Survey Report

14 July, 2010





Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 21 T8S, R17E

Well: Wellbore: Q-21-8-17

Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

Well Q-21-8-17

Q-21-8-17 @ 5262.0ft (RIG #2)

MD Reference:

North Reference:

Q-21-8-17 @ 5262.0ft (RIG #2)

Survey Calculation Method:

Database:

Minimum Curvature

EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983

SECTION 21 T8S, R17E

Utah Central Zone

System Datum:

Mean Sea Level

Site

Site Position:

Northing:

7,210,000.00ft

Latitude:

40° 6' 13.990 N

From:

Lat/Long

Easting:

2,055,000.00ft

Longitude:

110° 1' 3.925 W

Position Uncertainty:

0.0 ft

Slot Radius:

Grid Convergence:

0.95°

Well

Q-21-8-17, SHL LAT: 40 06 04.17, LONG: -110 01 06.70

Well Position

+N/-S +E/-W

0.0 ft 0.0 ft Northing: Easting:

7,209,002.93 ft 2,054,800.85 ft

11.43

Latitude: Longitude: 40° 6' 4.170 N

110° 1' 6.700 W

52,404

Position Uncertainty

0.0 ft

Wellhead Elevation:

5,262.0 ft

Ground Level:

5,250.0 ft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

2010/07/02

Declination (°)

Dip Angle

Field Strength

(nT)

IGRF2010

Audit Notes:

Design

Version:

1.0

Actual

Phase:

ACTUAL

Tie On Depth:

0.0

65.87

Vertical Section:

Depth From (TVD) (ft)

0.0

+N/-S (ft)

0.0

+E/-W (ft) 0.0

Direction (°) 133.64

Survey Program

Date 2010/07/14

From (ft)

To (ft)

Survey (Wellbore)

Tool Name

Description

421.0

6,683.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
421.0	0.60	162.00	421.0	-2.1	0.7	1.9	0.14	0.14	0.00
452.0	0.80	129.00	452.0	-2.4	0.9	2.3	1.42	0.65	-106.45
482.0	0.80	143.50	482.0	-2.7	1.2	2.7	0.67	0.00	48.33
513.0	1.10	138.40	513.0	-3.1	1.5	3.2	1.00	0.97	-16.45
544.0	1.50	144.80	544.0	-3.6	1.9	3.9	1.37	1.29	20.65
605.0	1.60	146.40	605.0	-5.0	2.9	5. 5	0.18	0.16	2.62
636.0	1.70	140.50	635.9	-5 .7	3.4	6.4	0.64	0.32	-19.03
667.0	2.00	134.20	666.9	-6.4	4.1	7.4	1.17	0.97	-20.32
697.0	2.50	125.80	696.9	-7.2	5.0	8.6	1.99	1.67	-28.00
728.0	3.00	124.80	727.9	-8.1	6.2	10.1	1.62	1.61	-3.23
758.0	3.40	121.40	757.8	-9.0	7.6	11.7	1.48	1.33	-11.33
 789.0	3.90	122.70	788.8	-10.0	9.3	13.6	1.63	1.61	4.19



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 21 T8S, R17E

Site: Well:

Q-21-8-17

Wellbore:

Wellbore #1

Design: Actual

Local Co-ordinate Reference:

TVD Reference:

IVD Reference: MD Reference:

Well Q-21-8-17

Q-21-8-17 @ 5262.0ft (RIG #2) Q-21-8-17 @ 5262.0ft (RIG #2)

North Reference:

True

Survey Calculation Method:

Database:

Minimum Curvature

EDM 2003.21 Single User Db

Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
820.0	4.30	124.00	819.7	-11.2	11.1	15.8	1.32	1.29	4.19
851.0	4.50	126.80	850.6	-12.6	13.1	18.2	0.95	0.65	9.03
881.0	4.90	128.00	880.5	-14.1	15.0	20.6	1.37	1.33	4.00
912.0	5.50	128.50	911.4	-15.8	17.2	23.4	1.94	1.94	1.61
944.0	6.20	130.30	943.2	-17.9	19.7	26.7			
976.0	6.90	130.30	9 4 5.2 975.0				2.26	2.19	5.63
1,008.0	7.50	131.00	1,006.7	-20.3 -23.0	22.5	30.3	2.25	2.19	4.69
			•		25.5	34.3	1.88	1.88	0.94
1,039.0	8.20	133.80	1,037.4	-25.9	28.6	38.5	2.38	2.26	5.48
1,071.0	8.80	132.90	1,069.1	-29.1	32.0	43.3	1.92	1.88	-2.81
1,103.0	9.40	131.50	1,100.7	-32.5	35.8	48.3	2.00	1.88	-4.38
1,134.0	10.10	130.60	1,131.2	-36.0	39.7	53.6	2.31	2.26	-2.90
1,166.0	10.50	130.10	1,162.7	-39.7	44.1	59.3	1.28	1.25	-1.56
1,198.0	11.00	130.00		-43.5					
			1,194.2		48.7	65.2	1.56	1.56	-0.31
1,230.0	11.30	130.30	1,225.6	-47.5	53.4	71.4	0.95	0.94	0.94
1,261.0	11.40	131.50	1,255.9	-51.5	58.0	77.5	0.83	0.32	3.87
1,293.0	12.10	132.70	1,287.3	-55.9	62.8	84.0	2.32	2.19	3.75
1,325.0	12.50	132.70	1,318.5	-60.5	67.8	90.8	1.25	1.25	0.00
1,356.0	12.90	134.10	1,348.8	-65.2	72.8	97.7	1.63	1.29	4.52
1,388.0	13.00	133.90	1,380.0	-70.2	78.0	104.8	0.34	0.31	-0.63
1,420.0	13.10	132.40	1,411.1	-75.1	83.2	112.1	1.10	0.31	-4.69
1,451.0	13.50	132.60	1,441.3	-79.9	88.5	119.2	1.30	1.29	0.65
1,483.0	13.40	132.30	1,441.3	-79.9 -84.9	94.0	126.6	0.38	-0.31	-0.94
1,515.0	13.50	131.30	1,503.6	-89.9	99.5	134.1	0.79	0.31	-3.13
1,547.0	13.80	131.60	1,534.7	-94.9	105.2	141.6	0.96	0.94	0.94
1,578.0	13.70	131.80	1,564.8	-99.8	110.7	149.0	0.36	-0.32	0.65
1,610.0	14.00	131.60	1,595.8	-104.9	116.4	156.6	0.95	0.94	-0.63
1,642.0	14.00	132.30	1,626.9	-110.1	122.2	164.4	0.53	0.00	2.19
1,673.0	13.80	132.50	1,657.0		127.7		0.66		
				-115.1		171.8		-0.65	0.65
1,705.0	14.10	132.60	1,688.0	-120.3	133.3	179.5	0.94	0.94	0.31
1,737.0	13.60	133.00	1,719.1	-125.5	139.0	187.2	1.59	-1.56	1.25
1,769.0	13.00	132.90	1,750.2	-130.5	144.4	194.6	1.88	-1.88	-0.31
1,800.0	13.00	132.90	1,780.4	-135.3	149.5	201.5	0.00	0.00	0.00
1,832.0	13.10	132.80	1,811.6	-140.2	154.8	208.7	0.32	0.31	-0.31
1,864.0	12.40	132.50	1,842.8	-145.0	160.0	215.8	2.20	-2.19	-0.94
1,895.0	11.72	130.90	1,873.1	-149.3	164.8	222.3	2.44	-2.19	-5.16
1,927.0	11.80	129.90	1,904.5	-153.5	169.8	228.8	0.68	0.25	-3.13
1,959.0	11.90	129.90	1,935.8	-157.7	174.8	235.4	0.31	0.31	0.00
•									
1,990.0	11.60	129.30	1,966.1	-161.8	179.7	241.6	1.04	-0.97	-1.94
2,022.0	11.40	128.80	1,997.5	-165.8	184.6	248.0	0.70	-0.63	-1.56
2,054.0	11.20	130.90	2,028.9	-169.8	189.4	254.3	1.43	-0.63	6.56
2,085.0	11.10	131.90	2,059.3	-173.8	193.9	260.3	0.70	-0.32	3.23
2,117.0	11.20	133.30	2,090.7	-177.9	198.5	266.4	0.90	0.31	4.38
2,149.0	11.10	133.20	2,122.1	-182.2	203.0	272.6	0.32	-0.31	-0.31
2,181.0	11.00	134.20	2,153.5	-186.4	207.4	278.8	0.52	-0.31	3.13
2,101.0	10.90	137.20	2,183.9	-190.4	211.5	284.6	1.87	-0.32	9.68
2,244.0	10.80	137.10	2,105.9	-190.0	215.6	290.7	0.32	-0.32	-0.31
2,276.0	10.60	135.80	2,215.4	-199.4	219.7	296.6	0.32	-0.63	-4.06
2,307.0	10.30	138.20	2,277.3	-203.5	223.6	302.2	1.71	-0.97	7.74
2,339.0	10.00	140.00	2,308.8	-207.7	227.2	307.8	1.36	-0.94	5.63
2,370.0	10.00	138.10	2,339.3	-211.8	230.8	313.2	1.06	0.00	-6.13
2,402.0	10.00	137.90	2,370.8	-215.9	234.5	318.7	0.11	0.00	-0.63
2,434.0	10.20	138.90	2,402.3	-220.1	238.2	324.3	0.83	0.63	3.13
2.465.0			•						
,	10.20	138.20	2,432.8	-224.2	241.9	329.8	0.40	0.00	-2.26
2,497.0	10.00	138.60	2,464.3	-228.4	245.6	335.4	0.66	-0.63	1.25



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 21 T8S, R17E

Site: Well:

Q-21-8-17

Wellbore: Design: Wellbore #1

Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well Q-21-8-17

Q-21-8-17 @ 5262.0ft (RIG #2)

Q-21-8-17 @ 5262.0ft (RIG #2)

rue

Minimum Curvature

EDM 2003.21 Single User Db

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,529.0	9.80	138.60	2,495.9	-232.6	249.2	340.8	0.63	-0.63	0.00
2,561.0	9.90	139.50	2,527.4	-236.7	252.8	346.3	0.57	0.31	2.81
2,592.0	10.10	138.50	2,557.9	-240.8	256.3	351.7	0.85	0.65	-3.23
2,624.0			·						
	10.30	138.20	2,589.4	-245.0	260.1	357.3	0.65	0.63	-0.94
2,655.0	10.70	138.40	2,619.9	-249.2	263.9	362.9	1.30	1.29	0.65
2,687.0	10.90	137.80	2,651.3	-253.7	267.9	368.9	0.72	0.63	-1.88
2,718.0	11.10	136.30	2,681.8	-258.0	271.9	374.8	1.13	0.65	-4.84
2,750.0	11.00	134.30	2,713.2	-262.4	276.2	380.9	1.24	-0.31	-6.25
2,781.0	11.30	133.20	2,743.6	-266.5	280.5	386.9	1.19	0.97	-3.55
2,813.0	11.60	133.50	2,775.0	-270.9	285.2	393.3	0.96	0.94	0.94
2,845.0	11.70	132.90	2,806.3	-275.3	289.9	399.8	0.49	0.31	-1.88
2,877.0	12.00	133.50	2,837.6	-279.8	294.7	406.3	1.01	0.94	1.88
2,908.0	12.00	131.40	2,867.9	-284.1	299.4	412.8	1.41	0.00	-6.77
			•						
2,940.0	12.00	131.00	2,899.2	-288.5	304.4	419.4	0.26	0.00	-1.25
2,972.0	11.90	132.80	2,930.5	-292.9	309.3	426.0	1.21	-0.31	5.63
3,004.0	12.00	131.90	2,961.8	-297.4	314.2	432.7	0.66	0.31	-2.81
3,035.0	12.30	133.50	2,992.2	-301.8	319.0	439.2	1.45	0.97	5.16
3,067.0	12.50	132.30	3,023.4	-306.5	324.1	446.1	1.02	0.63	-3.75
3,099.0	12.50	131.90	3,054.6	-311.1	329.2	453.0	0.27	0.00	-1.25
3,130.0	12.40	132.70	3,084.9	-315.6	334.2	459.7	0.64	-0.32	2.58
3,162.0	11.90	131.60	3,116.2	-320.2	339.1	466.4	1.72	-1.56	-3.44
3,194.0	11.30	130.80	3,147.5	-324.4	344.0	472.8	1.94	-1.88	-2.50
3,226.0	10.80	131.50	3,179.0	-328.4	348.6	478.9	1.62	-1.56	2.19
			·						
3,257.0	10.40	132.90	3,209.4	-332.3	352.8	484.6	1.53	-1.29	4.52
3,289.0	10.20	133.20	3,240.9	-336.2	357.0	490.4	0.65	-0.63	0.94
3,321.0	10.20	134.60	3,272.4	-340.1	361.1	496.0	0.77	0.00	4.38
3,352.0	10.20	135.60	3,302.9	-344.0	365.0	501.5	0.57	0.00	3.23
3,384.0	10.60	132.60	3,334.4	-348.0	369.1	507.3	2.10	1.25	-9.38
3,416.0	11.10	129.50	3,365.8	-352.0	373.7	513.3	2.40	1.56	-9.69
3,447.0	11.10	131.70	3,396.2	-355.8	378.2	519.3	1.37	0.00	7.10
3,479.0	10.90	131.00	3,427.7	-359.9	382.8	525.4	0.75	-0.63	-2.19
3,511.0	10.90	132.50	3,459.1	-363.9	387.3	531.4	0.89	0.00	4.69
3,543.0	11.20	133.60	3,490.5	-368.1	391.8	537.6	1.15	0.94	3.44
3,574.0	11.20	132.30	3,520.9	-372.2	396.2				
3,574.0 3,606.0	11.20		3,520.9 3,552.3			543.6 540.7	0.81	0.00	-4.19 = 00
3,638.0	10.60	133.90 135.30	3,552.3 3,583.7	-376.4	400.7	549.7	1.15	-0.63	5.00
3,669.0	10.80	135.30	3,583.7 3,614.2	-380.6	404.9	555.7	1.49	-1.25	4.38
3,701.0	11.30	135.70	3,614.2 3,645.6	-384.7 -380.1	409.0	561.5	0.69	0.65	1.29
			•	-389.1	413.3	567.6	1.56	1.56	0.00
3,733.0	11.80	135.30	3,676.9	-393.7	417.8	574.0	1.58	1.56	-1.25
3,765.0	12.20	134.00	3,708.2	-398.4	422.5	580.7	1.51	1.25	-4.06
3,796.0	12.60	131.90	3,738.5	-402.9	427.4	587.3	1.94	1.29	-6.77
3,828.0	12.70	133.30	3,769.7	-407.6	432.5	594.3	1.01	0.31	4.38
3,860.0	12.50	132.70	3,801.0	-412.4	437.6	601.3	0.75	-0.63	-1.88
3,892.0	12.20	133.70	3,832.2	-417.1	442.6	608.2	1.15	-0.94	3.13
3,923.0	11.90	135.80	3,862.6	-421.6	447.2	614.6	1.71	-0.97	6.77
3,955.0	11.60	133.80	3,893.9	-426.2	451.8	621.1	1.58	-0.94	-6.25
3,986.0	11.90	135.90	3,924.2	-430.7	456.3	627.4	1.68	0.97	6.77
4,018.0	12.20	135.70	3,955.5	-435.5	461.0	634.1	0.95	0.94	-0.63
			·						
4,050.0	12.30	135.60	3,986.8	-440.3	465.7	640.9	0.32	0.31	-0.31
4,082.0	12.30	135.00	4,018.1	-445.2	470.5	647.7	0.40	0.00	-1.88
4,113.0	12.20	136.40	4,048.4	-449.9	475.1	654.3	1.01	-0.32	4.52
4,146.0	11.90	135.50	4,080.6	-454.8	479.9	661.2	1.07	-0.91	-2.73
4,177.0	11.80	136.90	4,111.0	-459.4	484.3	667.5	0.98	-0.32	4.52
4,209.0	11.60	134.60	4,142.3	-464.1	488.8	674.0	1.59	-0.63	-7.19



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 21 T8S, R17E

Site: Well:

Q-21-8-17

Actual

Wellbore:

Wellbore #1

Design:

Local Co-ordinate Reference:

Well Q-21-8-17

TVD Reference: MD Reference:

Q-21-8-17 @ 5262.0ft (RIG #2) Q-21-8-17 @ 5262.0ft (RIG #2)

North Reference:

Survey Calculation Method:

Minimum Curvature

Database:

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,241.0	11.30	133.90	4,173.7	-468.5	493.4	680.4	1.03	-0.94	-2.19
4,273.0	11.70	134.30	4,205.0	-472.9	498.0	686.8	1.27	1.25	1.25
4,304.0	11.80	135.80	4.235.4	-477.4	502.4	693.1	1.04	0.32	4.84
4,336.0	11.80	135.80	4,266.7	-482.1	507.0	699.6	0.00	0.00	0.00
			·						
4,368.0	12.00	135.00	4,298.0	-486.8	511.6	706.2	0.81	0.63	-2.50
4,399.0	12.00	133.70	4,328.3	-491.3	516.2	712.6	0.87	0.00	-4.19
4,431.0	11.60	133.70	4,359.7	-495.8	520.9	719.2	1.25	-1.25	0.00
4,463.0	11.30	134.30	4,391.0	-500.2	525.5	725.5	1.01	-0.94	1.88
4,495.0	11.40	134.00	4,422.4	-504.6	530.0	731.8	0.36	0.31	-0.94
4,526.0	11.40	134.30	4,452.8	-508.9	534.4	738.0	0.19	0.00	0.97
4,558.0	11.10	135.50	4,484.2	-513.3	538.9	744.2	1.19	-0.94	3.75
4,590.0	10.80	134.40	4,515.6	-517.6	543.2	750.3	1.14	-0.94	-3.44
4,621.0	10.60	134.70	4,546.0	-521.6	547.3	756.0	0.67	-0.65	0.97
4,653.0	10.40	133.60	4,577.5	-525.7	551.4	761.9	0.88	-0.63	-3.44
			•						
4,685.0	10.20	134.30	4,609.0	-529.7	555.6	767.6	0.74	-0.63	2.19
4,716.0	10.10	135.90	4,639.5	-533.5	559.4	773.0	0.97	-0.32	5.16
4,748.0	10.00	135.20	4,671.0	-537.5	563.3	778.6	0.49	-0.31	-2.19
4,780.0	10.20	135.20	4,702.5		≯ 567.3	784.2	0.63	0.63	0.00
4,812.0	10.90	134.70	4,734.0	-545.6	571.4	790.1	2.21	2.19	-1.56
4,843.0	11.30	134.50	4,764.4	-549.8	575.7	796.1	1.30	1.29	-0.65
4,875.0	11.30	134.90	4,795.8	-554.2	580.1	802.3	0.24	0.00	1.25
4,907.0	11.20	134.60	4,827.2	-558.6	584.6	808.6	0.36	-0.31	-0.94
4,938.0	10.90	135.00	4,857.6	-562.8	588.8	814.5	1.00	-0.97	1.29
4,970.0	10.30	134.10	4,889.0	-566.9	593.0	820.4	1.95	-1.88	-2.81
5,002.0	10.30	136.80	4.920.5	-571.0	597.0	826.1	1.51	0.00	8.44
5,034.0	10.30	137.90	4,952.0	-575.2	600.9	831.8	0.61	0.00	3.44
5,065.0	10.10	139.30	4,982.5	-579.4	604.5	837.3	1.03	-0.65	4.52
5,003.0	10.10	138.60	5,014.0	-583.6	608.2	842.9		0.63	-2.19
5,129.0	10.30	137.40	5,045.5	-588.0	612.1	848.8	0.74 1.42	1.25	-3.75
			•						
5,160.0	10.90	136.50	5,075.9	-592.2	616.1	854.6	0.84	0.65	-2.90
5,192.0	10.80	135.90	5,107.4	-596.5	620.3	860.6	0.47	-0.31	-1.88
5,224.0	10.90	136.10	5,138.8	-600.9	624.4	866.6	0.33	0.31	0.63
5,255.0	10.90	135.50	5,169.2	-605.1	628.5	872.4	0.37	0.00	-1.94
5,287.0	10.90	135.90	5,200.7	-609.4	632.8	878.5	0.24	0.00	1.25
5,319.0	10.80	134.90	5,232.1	-613.7	637.0	884.5	0.67	-0.31	-3.13
5,350.0	10.60	135.60	5,262.5	-617.8	641.0	890.3	0.77	-0.65	2.26
5,382.0	10.70	135.80	5,294.0	-622.0	645.2	896.2	0.33	0.31	0.63
5,384.8	10.71	135.88	5,296.7	-622.4	645.5	896.7	0.63	0.32	2.93
Q-21-8-17	TGT								
5,413.0	10.80	136.70	5,324.4	-626.2	649.2	902.0	0.63	0.32	2.90
5,445.0	10.50	138.50	5,355.9	-630.6	653.2	907.9	1.40	-0.94	5.63
5,477.0	10.30	139.20	5,387.4	-634.9	657.0	913.6	0.74	-0.63	2.19
5,509.0	10.30	140.60	5,418.9	-639.3	660.6	919.3	0.78	0.00	4.38
5,540.0	10.20	139.20	5,449.4	-643.5	664.2	924.8	0.73	-0.32	-4.52
5,572.0	10.10	139.30	5,480.9	-647.8	667.9	930.4	0.32	-0.32 -0.31	0.31
5,604.0	9.80								
		138.10	5,512.4	-651.9	671.5	935.9	1.14	-0.94	-3.75 2.50
5,636.0	9.60	137.30	5,543.9	-655.9	675.2	941.3	0.75	-0.63	-2.50
5,667.0	9.60	138.30	5,574.5	-659.8	678.6	946.4	0.54	0.00	3.23
5,699.0	10.10	135.70	5,606.0	-663.8	682.4	951.9	2.09	1.56	-8.13
5,731.0	10.30	136.10	5,637.5	-667.8	686.3	957.6	0.66	0.63	1.25
5,762.0	10.00	134.10	5,668.0	-671.7	690.2	963.0	1.49	-0.97	-6.45
5,794.0	10.20	132.10	5,699.5	-675.5	694.3	968.6	1.26	0.63	-6.25
5,826.0	10.90	130.90	5,731.0	-679.4	698.6	974.5	2.29	2.19	-3.75



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 21 T8S, R17E

Site: Well:

Q-21-8-17

Wellbore:

Wellbore #1

Design: Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

.

North Reference:

Minimum Curvature

Well Q-21-8-17

Survey Calculation Method:

Database:

EDM 2003.21 Single User Db

Q-21-8-17 @ 5262.0ft (RIG #2)

Q-21-8-17 @ 5262.0ft (RIG #2)

Survey

5,921.0 11.30 131.90 5,824.1 -692.1 712.7 993.4 0.95 -0.94 -0.6 5,953.0 11.20 131.50 5,855.5 -696.2 717.3 999.6 0.40 -0.31 -1.2 5,984.0 11.60 131.00 5,885.9 -700.3 721.9 1,005.7 1.33 1.29 -1.6 6,016.0 12.00 131.20 5,917.2 -704.6 726.8 1,012.3 1.26 1.25 0.6 6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.3 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,953.0 11.20 131.50 5,855.5 -696.2 717.3 999.6 0.40 -0.31 -1.2 5,984.0 11.60 131.00 5,885.9 -700.3 721.9 1,005.7 1.33 1.29 -1.6 6,016.0 12.00 131.20 5,917.2 -704.6 726.8 1,012.3 1.26 1.25 0.6 6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.3 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.3	5,889.0	11.60	132.10	5,792.7	-687.8	707.9	987.0	0.56	-0.32	-2.26
5,984.0 11.60 131.00 5,885.9 -700.3 721.9 1,005.7 1.33 1.29 -1.6 6,016.0 12.00 131.20 5,917.2 -704.6 726.8 1,012.3 1.26 1.25 0.6 6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.3 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.3 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2	5,921.0	11.30	131.90	5,824.1	-692.1	712.7	993.4	0.95	-0.94	-0.63
6,016.0 12.00 131.20 5,917.2 -704.6 726.8 1,012.3 1.26 1.25 0.6 6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.3 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.37 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.2 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.5 6,491.0 13.40 132.50 6,384.7 -769.1 1,079.1 1,100.7 1.65 -0.97 -5.8 6,491.0 12.90 132.50 6,380.9 -775.5 786.8 1,093.6 1.52 1.25 3.7 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,491.0 12.80 132.50 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.2 6,522.0 12.60 130.80 6,442.4 -782.9 802.7 1,115.0 0.42 -0.31 1.2 6,554.0 12.10 130.80 6,442.4 -782.9 802.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16	5,953.0	11.20	131.50	5,855.5	-696.2	717.3	999.6	0.40	-0.31	-1.25
6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.33 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.3 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4	5,984.0	11.60	131.00	5,885.9	-700.3	721.9	1,005.7	1.33	1.29	-1.61
6,048.0 12.30 132.60 5,948.5 -709.1 731.9 1,019.0 1.31 0.94 4.33 6,079.0 12.30 132.90 5,978.8 -713.5 736.7 1,025.6 0.21 0.00 0.9 6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.3 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4	6,016.0	12.00	131.20	5,917.2	-704.6	726.8	1,012.3	1.26	1.25	0.63
6,111.0 11.50 133.80 6,010.1 -718.1 741.5 1,032.2 2.57 -2.50 2.8 6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.7 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.3 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.2 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9	6,048.0	12.30	132.60	5,948.5	-709.1		1,019.0		0.94	4.38
6,143.0 11.10 132.60 6,041.5 -722.4 746.1 1,038.5 1.45 -1.25 -3.78 6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.37 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.22 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.22 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9 6,364.0 13.04 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.79	-,									0.97
6,174.0 11.40 132.70 6,071.9 -726.5 750.5 1,044.5 0.97 0.97 0.37 6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.2 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.5 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.7										2.81
6,206.0 12.30 131.80 6,103.2 -730.9 755.4 1,051.1 2.87 2.81 -2.8 6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.2 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.5 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.7 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8						746.1	1,038.5	1.45		-3.75
6,237.0 12.80 132.80 6,133.4 -735.4 760.4 1,057.8 1.76 1.61 3.2 6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.2 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.9 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.56 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.79 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.22 6,522.0 12.60 130.80 6,442.4 -782.9 812.9 1,128.6 <td></td> <td></td> <td>132.70</td> <td>6,071.9</td> <td>-726.5</td> <td>750.5</td> <td>1,044.5</td> <td>0.97</td> <td>0.97</td> <td>0.32</td>			132.70	6,071.9	-726.5	750.5	1,044.5	0.97	0.97	0.32
6,269.0 13.00 133.90 6,164.6 -740.3 765.6 1,064.9 0.99 0.63 3.4 6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.21 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.99 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.56 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.7 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,491.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.2 6,552.0 12.60 130.80 6,442.4 -782.9 812.9 1,128.6 </td <td>6,206.0</td> <td>12.30</td> <td>131.80</td> <td>6,103.2</td> <td>-730.9</td> <td>755.4</td> <td>1,051.1</td> <td>2.87</td> <td>2.81</td> <td>-2.81</td>	6,206.0	12.30	131.80	6,103.2	-730.9	755.4	1,051.1	2.87	2.81	-2.81
6,301.0 12.90 131.90 6,195.8 -745.2 770.8 1,072.1 1.43 -0.31 -6.25 6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.96 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.56 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.79 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,441.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.77 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,12										3.23
6,333.0 13.00 132.20 6,227.0 -750.0 776.1 1,079.3 0.38 0.31 0.96 6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.56 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.76 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.77 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135			133.90		-740.3	765.6	1,064.9	0.99	0.63	3.44
6,364.0 13.00 131.40 6,257.2 -754.7 781.3 1,086.3 0.58 0.00 -2.56 6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.79 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.89 6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.77 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16						770.8	1,072.1			-6.25
6,396.0 13.40 132.60 6,288.4 -759.5 786.8 1,093.6 1.52 1.25 3.79 6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.77 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16	6,333.0	13.00	132.20	6,227.0	-750.0	776.1	1,079.3	0.38	0.31	0.94
6,427.0 13.10 130.80 6,318.5 -764.3 792.1 1,100.7 1.65 -0.97 -5.8 6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.7 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16	6,364.0	13.00	131.40	6,257.2	-754.7	781.3	1,086.3	0.58	0.00	-2.58
6,459.0 12.90 132.50 6,349.7 -769.1 797.5 1,107.9 1.35 -0.63 5.3 6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.77 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16					-759.5	786.8	1,093.6		1.25	3.75
6,491.0 12.80 132.90 6,380.9 -773.9 802.7 1,115.0 0.42 -0.31 1.29.0 6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.70.0 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00.0 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16			130.80	6,318.5	-764.3	792.1	1,100.7	1.65	-0.97	-5.81
6,522.0 12.60 130.80 6,411.2 -778.4 807.8 1,121.8 1.62 -0.65 -6.7 6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16	6,459.0		132.50	6,349.7	-769.1	797.5	1,107.9	1.35	-0.63	5.31
6,554.0 12.10 130.80 6,442.4 -782.9 812.9 1,128.6 1.56 -1.56 0.00 6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.10	6,491.0	12.80	132.90	6,380.9	-773.9	802.7	1,115.0	0.42	-0.31	1.25
6,585.0 11.60 129.20 6,472.8 -787.0 817.8 1,135.0 1.93 -1.61 -5.16	6,522.0	12.60	130.80	6,411.2	-778.4	807.8	1,121.8	1.62	-0.65	-6.77
										0.00
6.628.0 11.20 129.40 6.514.9 -792.4 824.4 1.143.4 0.93 -0.93 0.4										-5.16
6,683.0 10.60 129.80 6,568.9 -799.0 832.4 1,153.8 1.10 -1.09 0.73			129.40	6,514.9	-792.4	824.4	1,143.4	0.93	-0.93	0.47

Wallbara	Taracta
Wellbore	largets

 hit/miss target 	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
Q-21-8-17 TGT	0.00	0.00	5,300.0	-607.0	636.5	7,208,406.56	2,055,447.33	40° 5' 58.171 N	110° 0' 58.508 W

- actual wellpath misses by 18.1ft at 5384.8ft MD (5296.7 TVD, -622.4 N, 645.5 E)

- Circle	(radius	75.0

1		
Charled Die	Approved Dur	Detai
Checked By:	Approved By:	Date:
,		



Project: USGS Myton SW (UT) Site: SECTION 21 T8S, R17E

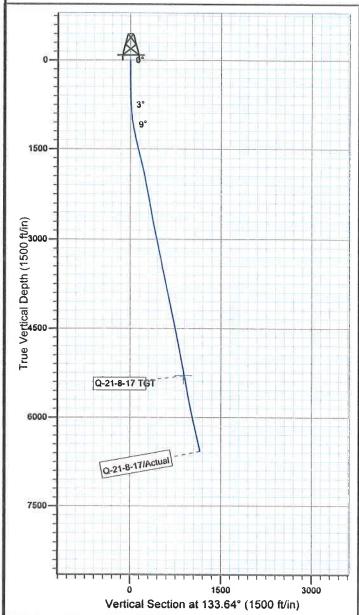
Well: Q-21-8-17 Wellbore: Wellbore #1 SURVEY: Actual

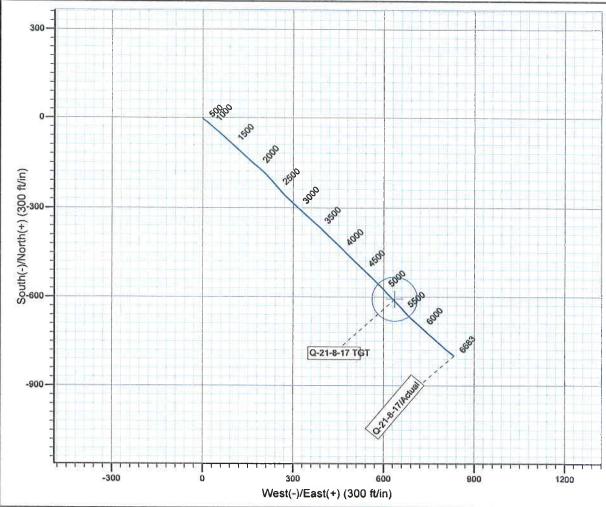
FINAL SURVEY REPORT



Azimuths to True North Magnetic North: 11.43°

Magnetic Field Strength: 52403.6snT Dip Angle: 65.87° Date: 2010/07/02 Model: IGRF2010





HATHAWAY BURNHAM & directional & mwd services & Design: Actual (Q-21-8-17/Wellbore #1)

Created By: Tim hudson Date: 19:32, July 14 2010 THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.

Daily Activity Report

Format For Sundry GRTR BNDRY II Q-21-8-17 5/1/2010 To 9/30/2010

GRTR BNDRY II Q-21-8-17

Rigging Up

Date: 7/3/2010

Ross #29 at 350. Days Since Spud - Chloride, +0.25# Cello Flake @ 15.8 ppg w/ 1.17 yield Returned 1 bbl to pit -) On 7/3/10 Cemented With BJ Services. Cemented 8 5/8" Casing With 160 sks Class G + 2% Calcium - 12 1/4" Hole. P/U Run 9 jts Of 8 5/8" Casing (Guide Shoe, Shoe Jt. Baffel Plate, 8 Jts 8 5/8' casing - Ross Rig # 29 Spud The Greater Boundry II Federal Q-21-8-17 On 7/2/10 @ 8:00 AM. Drilled 350' Of - Nofitied BLM & State Via Email On 7/1/10 Of Spud

Daily Cost: \$0

Cumulative Cost: \$50,491

GRTR BNDRY II Q-21-8-17

Rigging Up

Date: 7/5/2010

NDSI #2 at 350. 0 Days Since Spud - Rig Down Prepair For Rig Move To GB II Fed Q-21-8-17 - Notified BLM & State On 7/4/10 Via Email Of Rig Move@ 7:00 AM & BOPE Test @ 1:00 PM 7/5/10

Daily Cost: \$0

Cumulative Cost: \$55,341

GRTR BNDRY II Q-21-8-17

Drill 7 7/8" hole with fresh water

Date: 7/6/2010

NDSI #2 at 1253. 1 Days Since Spud - No H2s Reported last 24 Hrs. - 7/5/10 MIRU Set Surface Equipment With Marcus Liddell Trucking. (7.8 Mile Move From G-35-8-16) - Choke Lines & Manafold To 2000 psi For 10 Mins. Test 8 5/8" Surface Casing To 1500 Psi For 30 Mins, - Everything Tested Ok - Replace Brake Bands On Drawworks. (Broken Eye On Band Pit Side) - P/U BHA As Follows, Varel VM 616 PDC Bit, Hunting 7/8, 4.8 .33 Mud Motor, 1x30' Monel DC, 1x4' Double - Gap Sub, 1x3' Double Gap Sub, 1x2' Atenna Sub, 1x30' Monel DC. Scribe Directional Tools. - Drill 7 7/8" Hole From 351' To 1253'. 20,000 lbs WOB, 168 TRPM, 344 GPM, 150.3 fph AVG ROP. - Drill Plug, Baffel Plate Cement & Shoe From 310' To 351" - Accept Rig On 7/5/10 @ 13:30 PM. R/U B& C Quick Test, Test Safety, Upper Kelly Valves, Pipe & Blind Ram

Daily Cost: \$0

Cumulative Cost: \$98,606

GRTR BNDRY II Q-21-8-17

Drill 7 7/8" hole with fresh water

Date: 7/7/2010

NDSI #2 at 4010. 2 Days Since Spud - Drill 7 7/8" Hole From 1253' To 2331', 20,000 lbs WOB, 168 TRPM,344 GPM,143.3 fph ROP - Rig Service. Check Crown-A-Matic, Function Test Bop's - Drill 7 7/8" Hole From 2331' To 4010', 23,000 lbs WOB 168 TRPM, 344 GPM,104.9 fph AVG ROP - No H2s Reported Last 24 Hrs - Flow @ 3407' 10 Gal/Min - Last Survey,MD 3892' Angle Deg. 12.20 Drift Dir. 133.70 TVD 3832' Dogleg Severity 1.15

Daily Cost: \$0

Cumulative Cost: \$117,515

GRTR BNDRY II Q-21-8-17

Drill 7 7/8" hole with fresh water

Date: 7/8/2010

NDSI #2 at 5595. 3 Days Since Spud - Last Survey MD 5477' Angle Deg. 10.30, Drift Dir. 139.20 TVD 5387' Dogleg Severity.74 - No Flow - No H2s Reported Last 24 Hrs. - Drill 7 7/8" Hole From 4644' To 5595'. 24,000 lbs WOB,168 TRPM,344 GPM,61.3 fph AVG ROP. - Rig Service. Function Test Crown-A-Matic & Bop's. - Drill 7 7/8" Hole From 4010' To 4644'. 24,000 lbs WOB,168 TRPM,344 GPM, 75.3 fph AVG ROP

Daily Cost: \$0

Cumulative Cost: \$154,602

GRTR BNDRY II Q-21-8-17

Picking Up Drillpipe

Date: 7/9/2010

NDSI #2 at 6700. 4 Days Since Spud - Last Survey MD 6683' Angle Deg. 10.60 Drift Dir.129.80 TVD 5668' Dogleg Severity 1.10 - No Flow @ TD 6700' - No H2s Reported Last 24 Hrs. - Pickup Drillpipe. - Laydown Drillpipe To BHA. Well Flowing 8 gal/min.Decided To P/U Drillpipe To 4000' Pump Brine Water - Cir Hole For Laydown & Logs - Drill 7 7/8" Hole From 6007' To 6700' TD. 25,000 Isb WOB, 168 TRPM,344 GPM,60.2 fph AVH ROP - Rig Service,Function Test Bop's,Check Crown-A-Matic - Drill 7 7/8" Hole From 5595' To 6007', 25,000 Ibs WOB, 168 TRPM, 344 GPM,63.6 fph AVG ROP - Laydown Drillpipe To BHA. Well Flowing 8 gal/min.

Daily Cost: \$0

Cumulative Cost: \$176,593

GRTR BNDRY II Q-21-8-17

Shut Well In Monitor Casing Pressure

Date: 7/10/2010

NDSI #2 at 6700. 5 Days Since Spud - Shut Well In Monitor Pressure On Well - No H2s Reported Last 24 Hrs. - Nipple Down Bop's, Set Slips With 90,000# Tension - cement To Pit. Bumped Plug To 2454 psi. - (50:50:2+3% KCL +0.5%EC-1+.25#CF+.005#SF+.3SMS+FP-6L)Displaced with 158.2 BBLS.Returned 28 bbls - (PL II+3% KCL+5#CSE+0.5# CF+2#KOL+.5SMS +FP+SF) Then 425 sk Tail Cement @ 14.4 W/1.24 yield - Hook Up BJ Services Hard Line. Test Lines To 4000 psi , Pump 325 sk Lead Cement @ 11ppg W/3.50 yield - Rig Up BJ Cement Head Circulate Casing With Rig Pump - Float Collar Set @ 6643.36.00' KB (3 jts Will Be Transferred To Next Well R-21-8-17) - R/u Mascus Liddell Casing Crew, Run 153 Jts 5.5" J-55 15.5# Casing Shoe Set @ 6688.41KB Top Float - R/U B&C Quick Test, Test 5 1/2" Pipe Rams To 2000 psi For 10 mins. Tested Ok - 6688' To 3000'. - With DISGL/SP/GR Suite From Loggers TD of 6688' To Surface Casing. And DSN//SDL/GR/CAL Suite From - Log Well With Phoenix Surveys,Run To Bottom Tools Quit Working Run Out Change Tools ,Run In Hole Log - LDDP & BHA - Circ Bottoms Up, Pump 260 bbls 10# Brine - Pick Up Drillpipe To 4000' - Clean Mud Tanks. Well Starting Flowing Water Back

Daily Cost: \$0

Cumulative Cost: \$333,378

GRTR BNDRY II Q-21-8-17

Wait on Completion

Date: 7/11/2010

NDSI #2 at 6700. 6 Days Since Spud - Rig Down Move to GB II Fed R-21-817, Remove Bop's Off Well, Install Well Head Packing And Jam Nut. - in To Rig Down - Well Shut In Monitor Casing Preessure. 0 psi On Csg. Open well up. Give Back 1 Gal Water.Shut Back - Released

Rig At 10:30 AM 7/10/10 Finalized

Daily Cost: \$0

Cumulative Cost: \$336,649

Pertinent Files: Go to File List

Form 3160 - 3 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

Lease Serial No. UTU-76954

BUREAU OF LAND MAN	IAGEMEN	T		010-70354		i
APPLICATION FOR PERMIT TO		-		6. If Indian, Allote NA	e or Tribe	Name
la. Type of work: DRILL REENTER				7 If Unit or CA Agreement, Name and No. Greater Boundary II Mon. But		
lb. Type of Well: ✓ Oil Well				8. Lease Name and Well No. Greater Boundary II Federal Q-21-8-17		
Name of Operator Newfield Production Company	· · · · · · · · · · · · · · · · · · ·			9. API Well No. 43 013		75
3a. Address Route #3 Box 3630, Myton UT 84052		0. (include area code)) 646-3721	10. Field and Pool, or Exploratory Monument Butte			
4. Location of Well (Report location clearly and in accordance with an	y State require	ments.*)	11. Sec., T. R. M. or Blk. and Survey or Area			
At surface NW/SW 1810' FSL 661' FWL At proposed prod. zone SW/SW 1205' FSL 1300' FWL				Sec. 21, T8S F	R17E	
14. Distance in miles and direction from nearest town or post office* Approximately 11.8 miles southeast of Myton, UT				12. County or Parish Duchesne		13. State
15. Distance from proposed*	16. No. of	acres in lease	17. Spacin	g Unit dedicated to this	well	I
location to nearest property or lease line, ft. Approx. 1205' f/lse, 5300' f/unit (Also to nearest drig. unit line, if any)	15	661.03		20 Acres		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1485'	st well, drilling, completed.			WBIA Bond No. on file WYB000493		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5250' GL	22 Approx	imate date work will sta	rt*	23. Estimated duration (7) days from SPI		release
	24. Atta	chments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas	Order No.1, must be a	tached to thi	s form:		
 Well plat certified by a registered surveyor. A Drilling Plan. 	,	Item 20 above).	•	as unless covered by an	existing b	oond on file (see
3. A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).	Lands, the	5. Operator certific 6. Such other site BLM.		rmation and/or plans a	s may be re	equired by the
25. Signature Warrie Cropin	1	(Printed/Typed) die Crozier			Date	====== ===============================
Title Regulatory Specialist						
Approved by (Signature)	Name	(Printed/Typed) Stephanie	J Ho	wavd	Date	3/10
Assistant Field Manager Lands & Mineral Resources	Office	VERNA	L FIEL	D OFFICE		
Application approval does not warrant or certify that the applicant holds conduct operations thereon.	legal or equi	table title to those right	s in the subj	ect lease which would e	entitle the a	pplicant to
	DITIONS	OF APPROVA	LATTA(CHED		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri States any talse, fictitious or fraudulent statements or representations as to	me for any po any matter v	erson knowingly and within its jurisdiction.	illfully to m	ake to any department o	or agency (of the United
(Continued on page 2) INSN GNV9 BOUSEN! EL	ห่o ไปA≛	หน้อ		*(Inst	ructions	on page 2)
MOTIOE OF ADDOLLAR	4 34 10					

1 MA 85 JUN 0003

NOS apa posted 11-7-2009

JAN 25 2010





UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT **VERNAL FIELD OFFICE**



170 South 500 East

(435) 781-4400 **VERNAL, UT 84078**

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Newfield Production Company	Location:	NWSW, Sec. 21, T8S, R17E
Well No:	Greater Boundary II Federal Q-21-8-17	Lease No:	UTU-76954
API No:	43-013-50175	Agreement:	Greater Monument Butte (GR)
			Unit

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)		Forty-Eight (48) hours prior to construction of location and access roads.			
Location Completion (Notify Environmental Scientist)		Prior to moving on the drilling rig.			
Spud Notice (Notify Petroleum Engineer)		Twenty-Four (24) hours prior to spudding the well.			
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.			
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.			
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.			

Page 2 of 6 Well: Greater Boundary II Federal Q-21-8-17 1/12/2010

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
 work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
 mitigation may be necessary for the discovered paleontologic material before construction can
 continue.

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

Variances Granted

Drilling

- Variance on using a diverter bowl in place of a rotating head. The diverter bowl forces the air and cutting returns to the reserve pit and is used to drill the surface casing (surface to a total depth of 350 feet). The surface casing occurs within the Uinta Formation which is a non-hydrocarbon bearing zone and thus has no possibility of gas pressure.
- Newfield Exploration request permission to use a blooie line with a discharge less than 100 feet from the wellbore in order to minimize the size of the well pads and direct the cuttings and circulating mediums into the reserve pit. The well bore is located approximately 35 feet from the reserve pit which is 40 feet wide; a 100 feet blooie line would discharge the cuttings and circulating mediums across the reserve pit and off the location. The requested length of the blooie line to drill the surface casing (surface to a total depth of 350 feet) is 35 feet. The surface casing occurs within the Uinta Formation which is a non-hydrocarbon bearing zone and thus has no possibility of gas pressure.
- Variance granted on operating without an automatic igniter or continuous pilot light on the blooie
 line due to the fact the air rig is only used to drill the surface casing (surface to a total depth of 350
 feet). The surface casing occurs within the Uinta Formation which is a non-hydrocarbon bearing
 zone and thus has no possibility of gas pressure.
- Variance granted permission to use a trailer mounted compressor located less than 100 feet from the well bore in order to minimize the well pad size. The trailer mounted compressor is located 50 feet from the wellbore and in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut off valve on the trailer that is located approximately 15 ft from the air rig, (2) pressure relief valve on the compressor, and (3) Spark arresters on the motors. The compressor only used in the drilling of the surface casing (surface to a total depth of 350 feet). The surface casing occurs within the Uinta Formation which is a non-hydrocarbon bearing zone and thus has no possibility of gas pressure.
- Operator must notify BLM Vernal office of any active gilosnite operation within 2 miles of the location 48 hours prior to any blasting on this well location

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.

- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times.
 Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4.

Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
 Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
 future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
 BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
 hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
 be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.